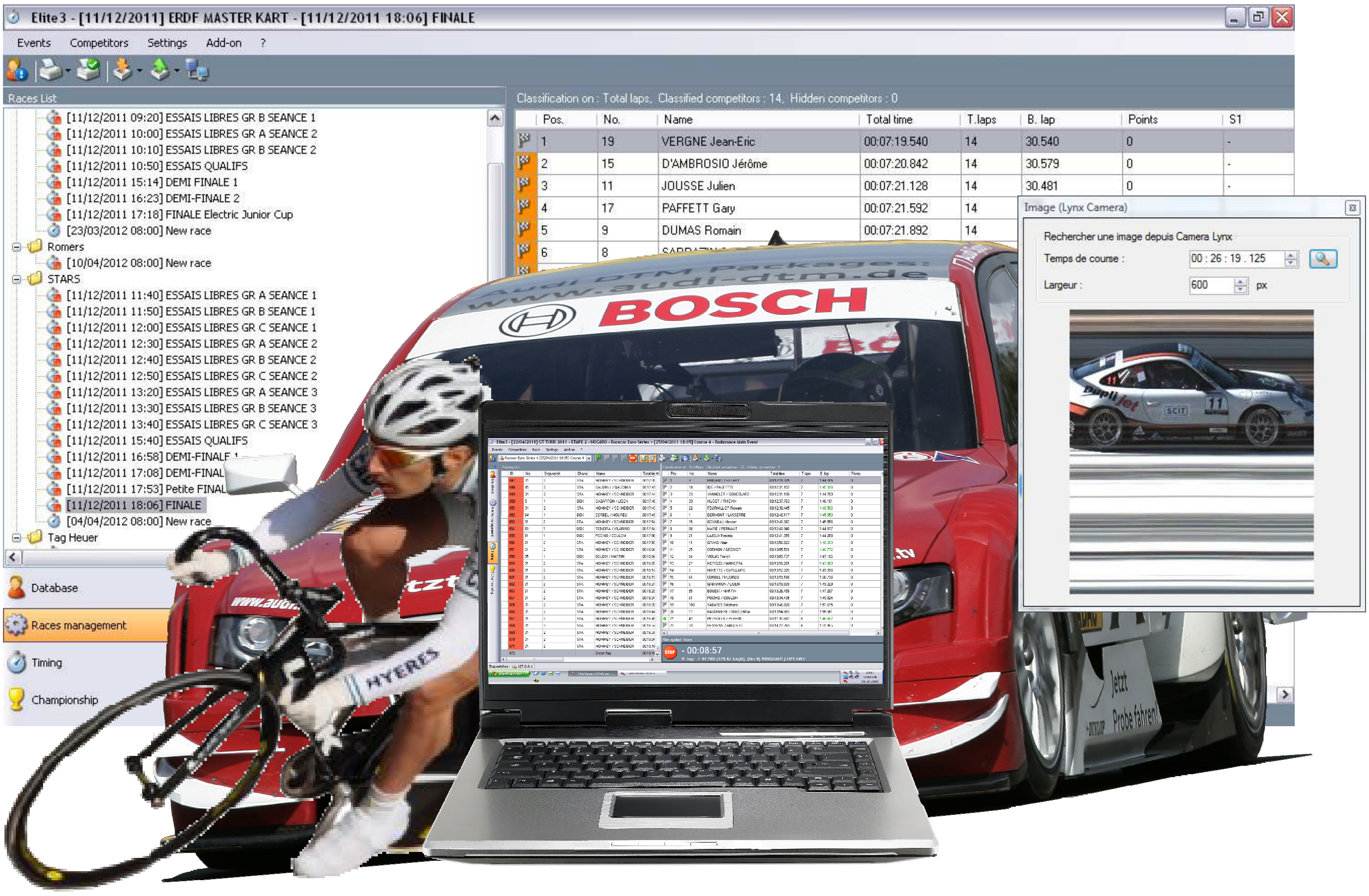
TAGHeuer

PROFESSIONAL TIMING

TAG Heuer by Chronelec Software Suite

Version 11/2012



1. System requirements

To use the software your computer must be equipped with:
Operating system: Windows 2000, Windows XP, Windows Vista, Windows 7
RAM: 1GB recommended
Microsoft .NET Framework 2.0
Hardlock Dongle installed (Note that the Master Key is blue and the « Slave » Red)

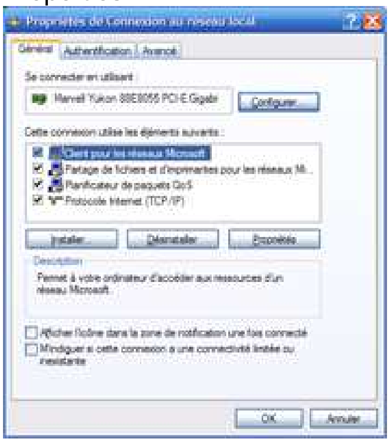
2. Network requirements

The Elite v3 software uses Windows file sharing to import data network.

You must have file sharing enabled to use this feature.

By default, the software is installed in the directory C:\Chronelec\Elite v3\.

The Data folder contains all events and championships. To import data network, you have to share this directory.
Activate network shares:
Click on Control Panel and then click Network Connections. Make a right click on your card and then select Properties.



Check that file sharing is activated.

2.1.1. Share data directory:



Share Data folder and select authorizations reading for everyone.



Make a right click on the Data folder and select Sharing.

2.1.2. Connecting to the network drive

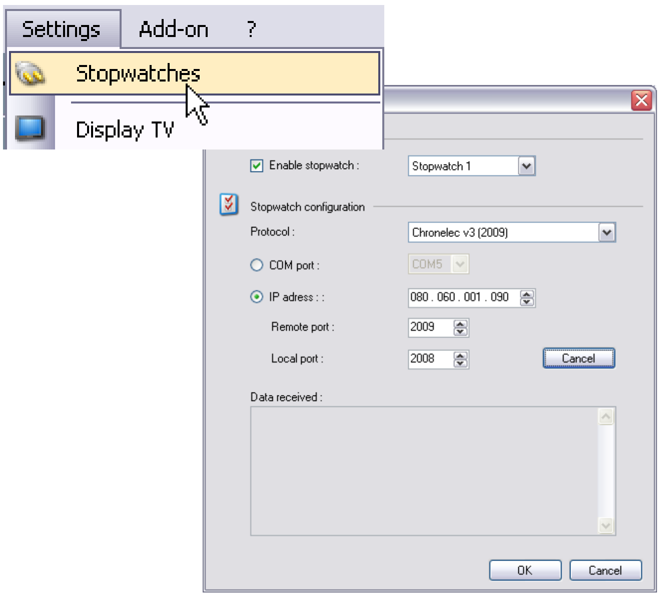
Go to the workstation and select the Tools menu, then connect a network drive.
Select a letter available and enter the network path of Data directory..
For Example:
You want to connect to Data directory of PC with the IP address 192.168.0.100:
Enter \\192.168.0.100\Data. If the connection is successful, another letter will appear in the workstation and you have to view files in the Data directory.



In the software, simply specify the letter of your choice (Z for example) to import data from the network.

3. Hardware setting

3.1.1. Protocol selection

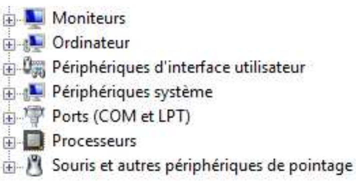


Firstly, you have to set the communication port of your computer.
You may use a serial cable (with or without USB Adapter) or over Ethernet.

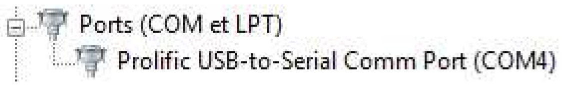
COM Port: Set the right com port used. In order to find the COM Port number you may refere to your Operating system manager.

Select the COM Port attributed by your computer.
Open up Device Manager. Right click on "My Computer"
and select properties (at the bottom of the list that pops up).

Click on the "Hardware" tab.
Click on the "Device Manager" button and a something similiar to this picture should appear.



Click on the '+' sign on the left of the "Ports (COM & LPT) to expand it.
The list of printers and Serial ports available will be shown.
Make a note of those.

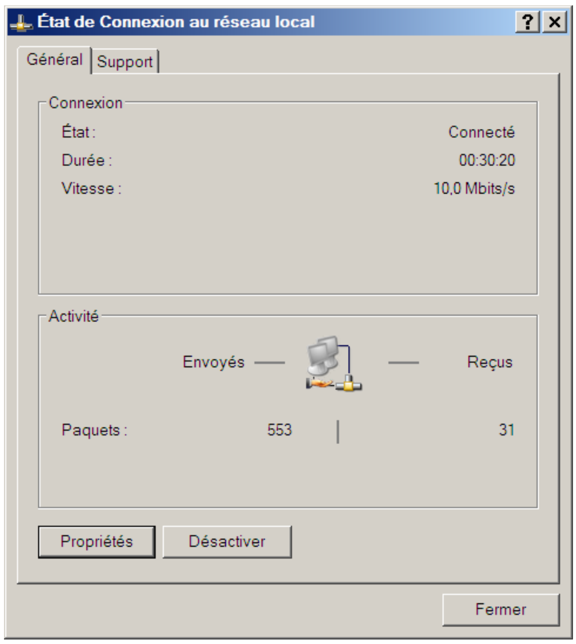


IP Address: The default IP address of the decoder is 192.168.000.010

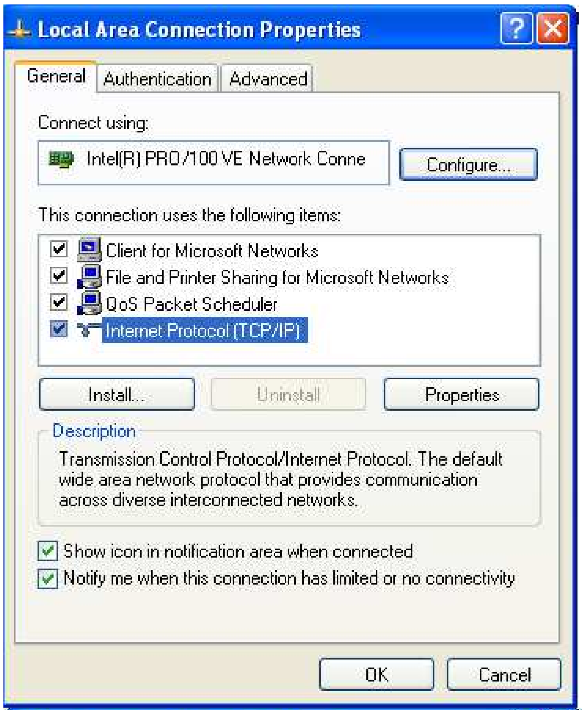
In order to communicate with the decoder, the computer should be on the same Network and subnet mask.

How to set your Computer IP:

- Select the program **Network connection** (**Start** → **Setting** → **Control Panel**) We suggest that you create a short cut from your desk top to simplify the access to the LAN.
- Select **Local Area Connection**
- Select **Properties**



- Choose **Internet Protocol TCP/IP**
- Again, select **Properties**

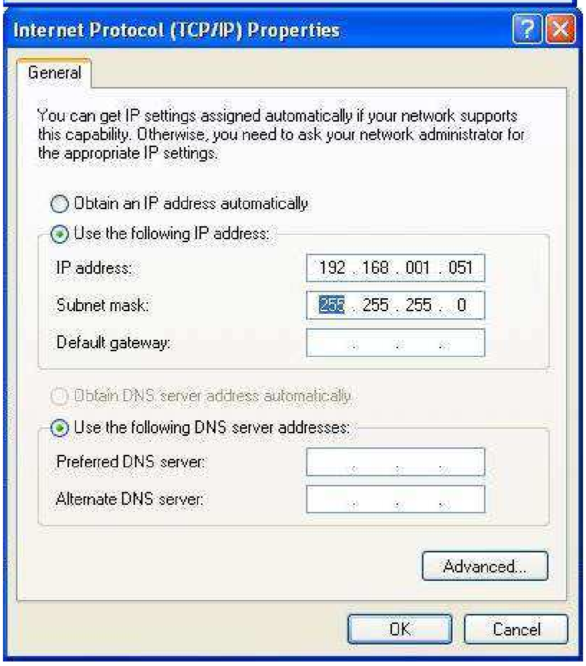


- Select **Use the following IP address**
- Enter the correct IP address
  Example: **192.168.000.001**
  The **Subnet mask** will come automatically (255.255.255.0)

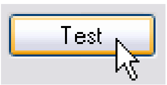
Note
The IP addresses should be similar on the first 3 groups of the 3 numbers (example : **192.168.000.xxx**)
The last groups of 3 numbers should be different
Example:
Decoder IP = 192.168.0.**10**
PC IP = 192.168.0.**03**

If your PC is never connected to a LAN, you can make this address permanent.

If not, to retrieve to the original setting, please select **Obtain an IP address automatically**

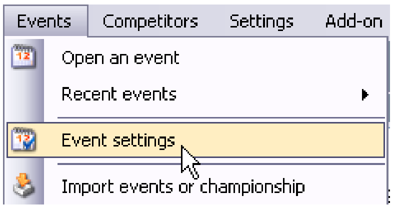


In order to test the communication between the decoder and your computer you may do a brief test. Data frames should come into the communication window.



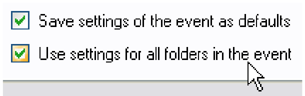
Note that this test mode don't work with the Chronoprinter 540.

3.1.1. Loop setting (Start – Finish – Split times)





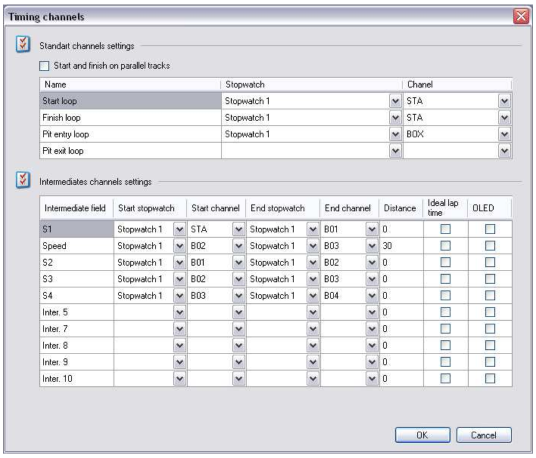
If you have to use the same settings several times, don't hesitate to tick those options below.



This window allows you to set all timing loop and/or Timer Channels.

On the below example, we have:

- 1 Start / Finish loop (STA)
- 1 Pit entry (BOX)
- 2 Distant decoder (B01 and B04)
- 1 Distant Speed, Speed measuring on 30 meters (B02 + B03)



If you set a distance, Elite will automatically consider it as a speed measuring zone and calculate the average speed. The "speetrap" should always have more than 10 meters for speeds over 100km/h (60mph) in order to get a reliable measure.

IMPORTANT

Note that "passive" Transponder like the RC or RK, after each ID transmission goes into a sleep mode for 5 seconds, no second transmission is possible whitin this moment.

4. Create a Network in order to work on Master / Slave basis

4.1.1. Change TCP/IP Settings

TCP/IP defines the language that your computer uses to communicate with other computers. In our application we do not recommend using automated Dynamic Host Configuration Protocol (DHCP) to automatically assign Internet Protocol (IP)

Open Network Connections by clicking the Start button, clicking Control Panel, clicking Network and Internet, clicking Network and Sharing Center, and then clicking Manage network connections.

1. Right-click the connection that you want to change, and then click Properties. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
2. Click the Networking tab. Under This connection uses the following items, click either Internet Protocol Version 4 (TCP/IPv4) To specify IPv4 IP address settings, do one of the following:
   - o To obtain IP settings automatically, click Obtain an IP address automatically, and then click OK.
   - o To specify an IP address, click Use the following IP address, and then, in the IP address, Subnet mask, and Default gateway boxes, type the IP address settings.

4.1.2. Create a homegroup

Open HomeGroup by clicking the Start button, clicking Control Panel, typing homegroupe in the search box and then clicking HomeGroup.

On the Share with other home computers running Windows 7 page, click Create a homegroup, and then follow the instructions.

NOTE:

- If a homegroup already exists on your network, Windows will ask if you would like to join it instead of creating a new one.
- If you don't have a home network, you'll need to set one up before creating a homegroup.
- If your computer belongs to a domain, you can join a homegroup but you can't create one. You can access files and resources on other homegroup computers, but you can't share your own files and resources with the homegroup.

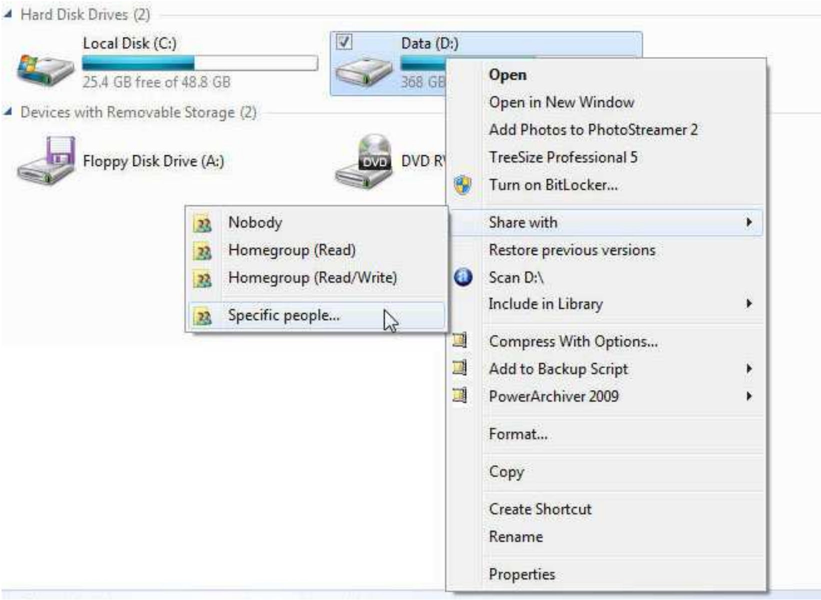
Computers must be running Windows 7 to participate in a homegroup. HomeGroup is available in all editions of Windows 7. In Windows 7 Starter and Windows 7 Home Basic, you can join a homegroup, but you can't create one.

4.1.3. Share folders (C:\Chronelec\Elite v3\Data)

Right-click a drive or folder, click Share with and then click Advanced sharing

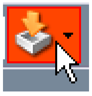
1. In the dialog box that appears, click Advanced Sharing. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.
2. In the Advanced Sharing dialog box, select the Share this folder check box.
3. To specify users or change permissions, click Permissions.

4. Click Add or Remove to add or remove users or groups.
5. Select each user or group, select the check boxes for the permissions you want to assign for that user or group, and then click OK.
6. When you've finished, click OK.



NOTE that you can't share the root of a drive with a dollar sign following the drive letter as in versions of Windows earlier than Windows Vista. For example, you can't share the root of your C drive as "C$," but you can share it as "C" or any other name.

On Elite V3 SLAVE

 Import the current race edited on the Master



Point directly on the “Master” folder over the network and import



5. Getting Started

Elite v3 includes 4 main sections:

Database:
Allows saving your competitors to copy them more easily in future events. There is no requirement to copy your competitors in the database. You can easily import competitors in the software without going through the database.

Races management:
Allows you to manage races of the event. You can print the results, calculating merges of races, apply penalties.

Timing:
Allows you the timing races of the event. The passing of competitors are displayed on the left and the classification is displayed on the right.

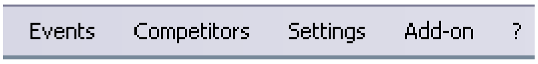
Championship:
Allows you to manage a championship, to combine several different event results.
The menus at the top may change depending on the section, and you must use the right click of the mouse to show some options.

6. Interface description

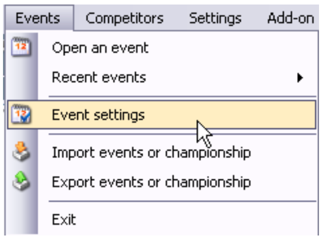
- Main Database
- Event A
  - Database of Event A
  - Category X
    - Race 1
    - Race 2
    - Merge 1
    - Copy competitors 1
  - Category Y
    - Race 1
    - Race 2
    - Merge 1
    - Copy competitors 1
- Event B
  - Database of Event B
  - Category X
    - Race 1
    - Race 2
    - Merge 1
    - Copy competitors 1
  - Category Y
    - Race 1
    - Race 2
    - Merge 1
    - Copy competitors 1
- Championship
  - Category X
  - Category Y

Principle of software:

Create an event. The event gathers together all races of all categories.
Create folders. In general, it creates a folder by category.
For example, if 4 different categories in the event and that these categories are not timed at the same time, we will create 4 folders.
Create races merges and competitors copy for each folder.
Races allow to timing competitors, merges allow to merge races or other merges and competitors copy allow to copy competitors in races automatically.
Import competitors in the folder from a text file, Excel or database. Then copy them in the races.



6.1.1. Events

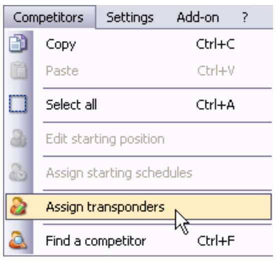


To create a new event or open a recent event.

In the Event Settings information you may find all setting such as:
- Track Name / length
- Date
- Hardware Setting
- Print and results settings
- Web / Server broadcasting settings

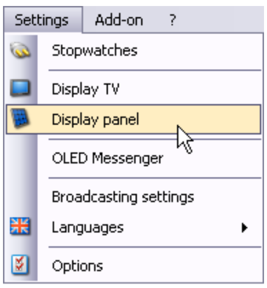
Import and Export events or championship from or to another Elite Software.

6.1.2. Competitors



Here you can manage, edit all competitors information.
Copy/Paste function is active in Elite v3 in order to add, remove or edit all information.
Double click on the selected competitor opens up automatically the information board.

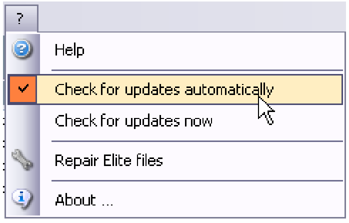
6.1.3. Settings



Stopwatches : Hardware setting.

You can enable up to 9 Stopwatches connected over serial com port or Ethernet. Decoder or other compatible TAG Heuer Timing system.

6.1.4. Help



We recommend that check for updates is selected (needs an internet acces).

Repair Elite files. Restore all files if you encounter some troubles after update or operating system change.

7. Database

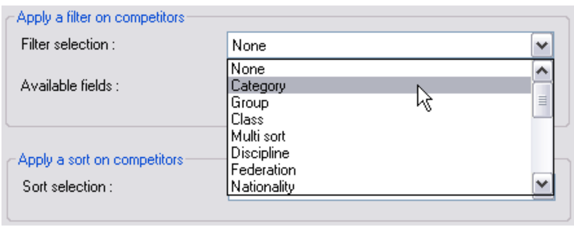
Shortcut: CTRL+1



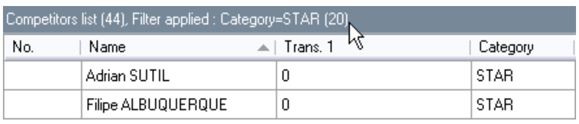
The Database conteins all competitors from all events.
Until you have all competitors in your database, it will be easy to import them (with filter or copy paste function) in your race.



 Filter function : This function allows you to show only requested competitors. Sorting possibilities are listed in the window



Here is an example, filter selection : Category, available and selected field : STAR
Only 20 competitors on 44 are displayed in the main window.



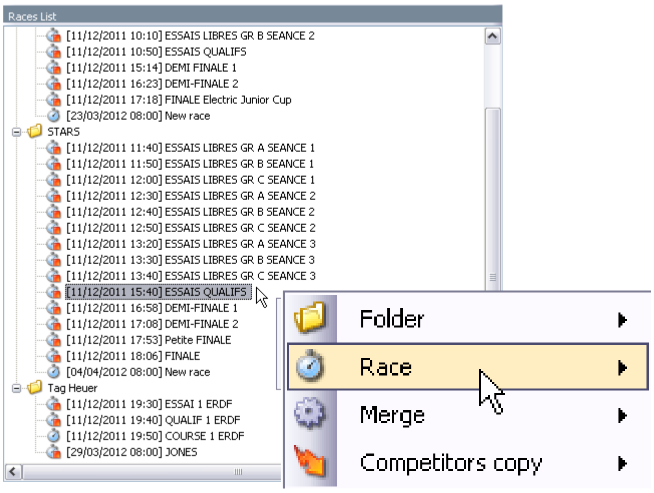
Printer function: to print competitors list: 
Import/Export funciton : With this function you can either import from a text file or .csv database or paste from your excel clipboard. 

8. Races Management

Shortcut: CTRL + F2



In order to create a new folder, right click inside the race list on the left. A new windows will appear.

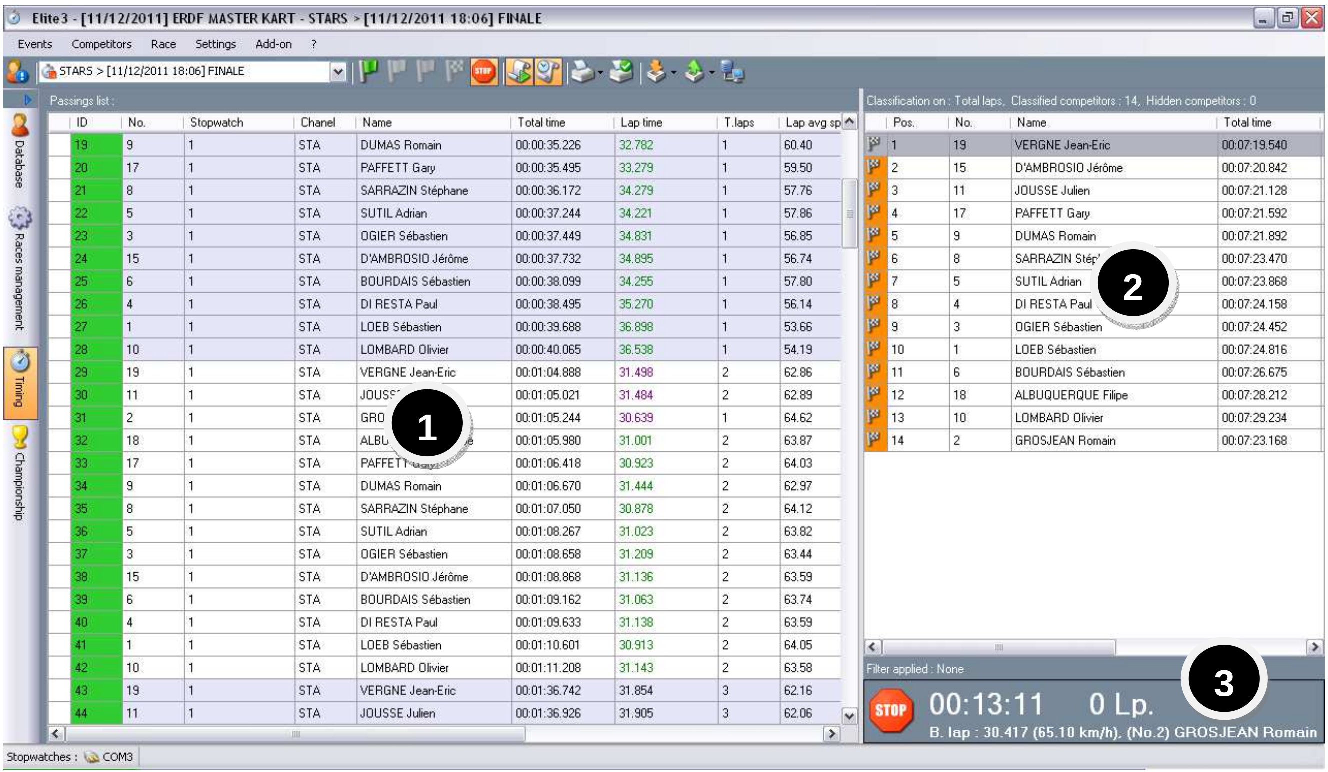


In our example, we have one Event (EDRF Master Kart of Bercy).
An individual folder has been created for each category (Junior, Stars and TAG Heuer).
In each folder you'll find all concerned races set as Qualifiying, Race or Final.

9. Timing

Timing

This is the Timing windows is visible during a race.
All passings are listed in the left window (1). Live classification on the right window (2)
On the example below, we started the decoder at 0, race of 14 laps.
Remaining laps, race time and best lap are show in the bottom window (3).



In the “Timing” window, you have several options:

Race selection



On the left you have little icons which helps you to recognize the race « status »

Stopped Race

Running Race (note that you cannot start a new race if another is still running)

New (blank) Race

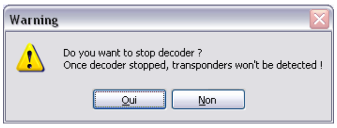
Green Flag : Start Race / Start decoder (no passings are recorded if the Race is not started)

Yellow Flag : Safety Car out

Red Flag: Race stopped by race direction, passings are still recorded

Checkered Flag: Manual Race finish (note that this option won't be available if you set laps or maximum race time)

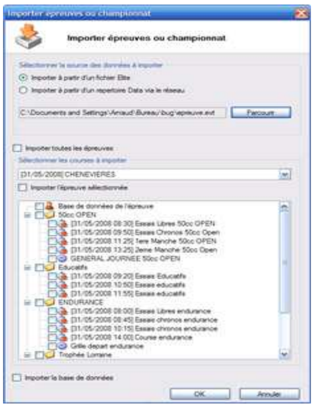
Stop Race / Stop decoder. A warning window will appear.



All informations will be listed in the passing list with race time or time of day:

112				Green flag	00:05:53.867
113				Yellow flag	00:05:55.315
114				Red Flag	00:06:13.319
115				Finish flag	00:06:28.312

9.1.1. Import events or championchip



You can import events or championships easily from Elite file or Data networking folder.

The drop-down list shows all the events found in the source data.

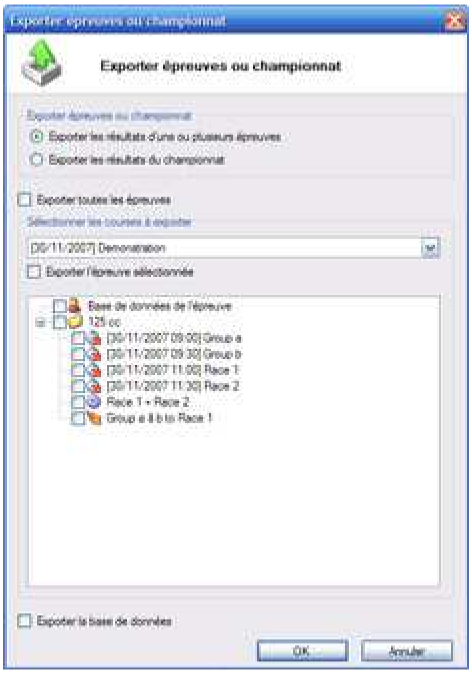
Import all events:
All events from the drop-down list will be imported.

You can also import only a race for example, in this case, just select the race.

Import database:
Allow importing the database, competitors with the same ID will be overwritten.

If data to import already exist on your PC, it will be replaced.

Export events or championship



You can export events or championships easily.

Exporter all events:
All events from the drop-down list will be exported to a Elite file.

Export selected events:
Exports selected event from the drop-down list. You can export several different events at the same time.

You can also export only a race for example. In this case, just check the race

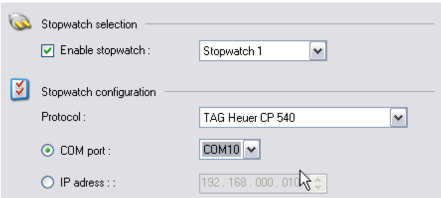
10. Track installation example

10.1.1. Start at the Time of Day (TOD Start)

Start/Finish with Elite decoder or Chronoprinter 540 (Starting schedule)

IMPORTANT

Note that if you use Distant decoder for Splits, the distant decode should be GPS synced (optional). Normal distant decoder starts at 00:00:00 when they get the synchro signal from the Elite Decoder over RS485. For settings, please refer to "decoder settings software" (Chapt.15).



Go into the Race management



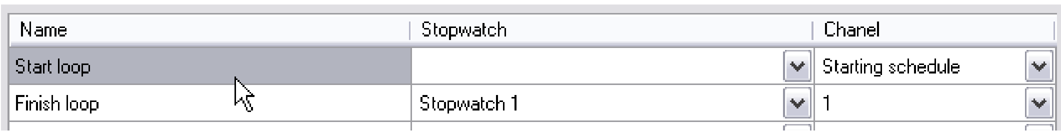
Double click or right click on your race folder



Parameters

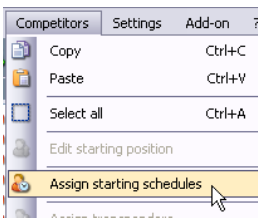


For the « Start loop » leave the stopwatch option empty and select « Starting schedule »

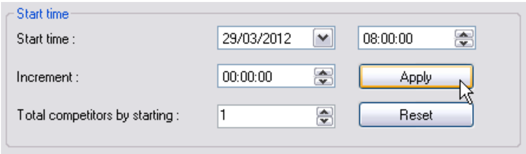


Name	Stopwatch	Chanel
Start loop		Starting schedule
Finish loop	Stopwatch 1	1

Then you'll have to assign starting schedules to all competitors (competitors / Assign starting schedule)

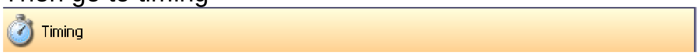


Select all competitors and enter an approximate Start Time (this will be corrected afterwards when we get the TOD from the Chronoprinter).

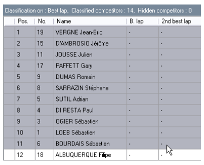


Apply. You'll see that the Start Time column is updated.

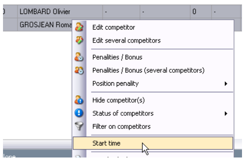
Then go to timing



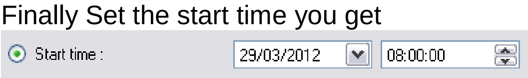
Green Flag and wait the CP540s signal. Pass (assign no competitor).
Copy Start time and select all competitors in the right window.



Click right…. And select Start Time.



Finally Set the start time you get



When Competitors cross the finish line (with a Photocell passing) so you'll have to set the ID number manually as you are not using Transponder.
Elite will automatically consider that the competitors ended the race (checkered flag) and display race time.

10.1.2. Race start at 00:00:00

Lap Timing with 2 splits and speed measuring loops

Same Start – Finish loop connected to STA

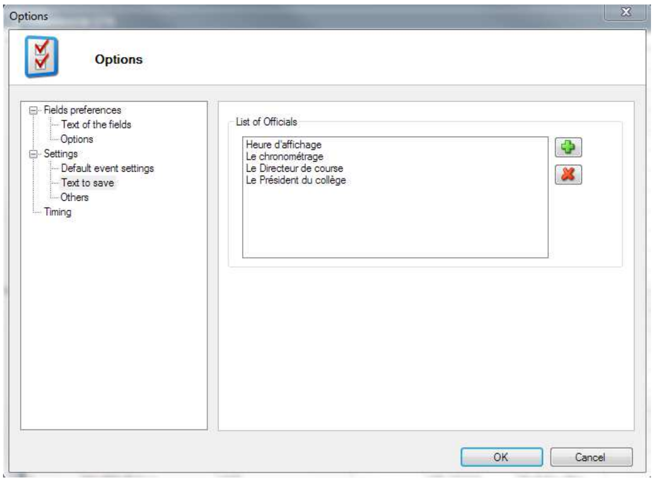
Name	Stopwatch	Chanel
Start loop	Stopwatch 1	STA
Finish loop	Stopwatch 1	STA

Distant 2 loops connected over RS485
Loop setting B01 (second loop is automatically incremented +1, so in our example B02)

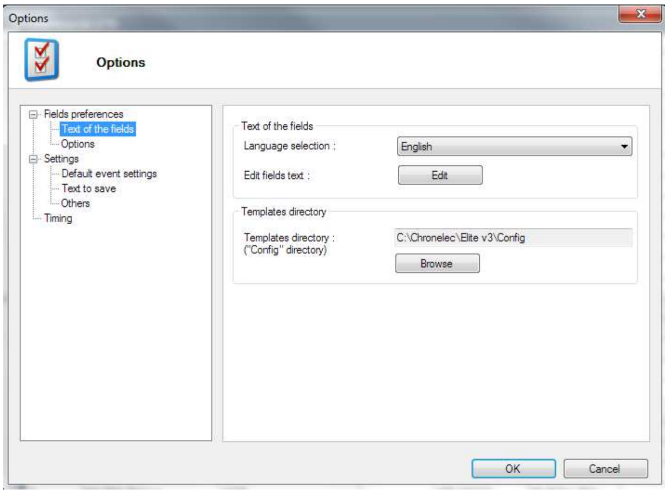
Intermediate field	Start stopwatch	Start channel	End stopwatch	End channel	Distance	Ideal lap time	OLED
S1	Stopwatch 1	STA	Stopwatch 1	B01	0	☐	☐
Speed	Stopwatch 1	B01	Stopwatch 1	B02	10	☐	☐
S2	Stopwatch 1	B02	Stopwatch 1	STA	0	☐	☐

11. Print Settings

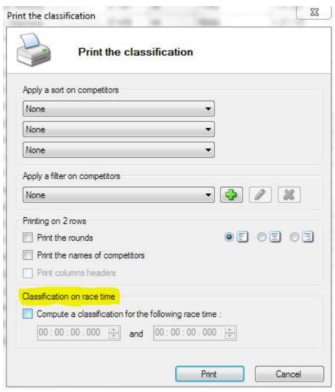
You can set all list of officials:



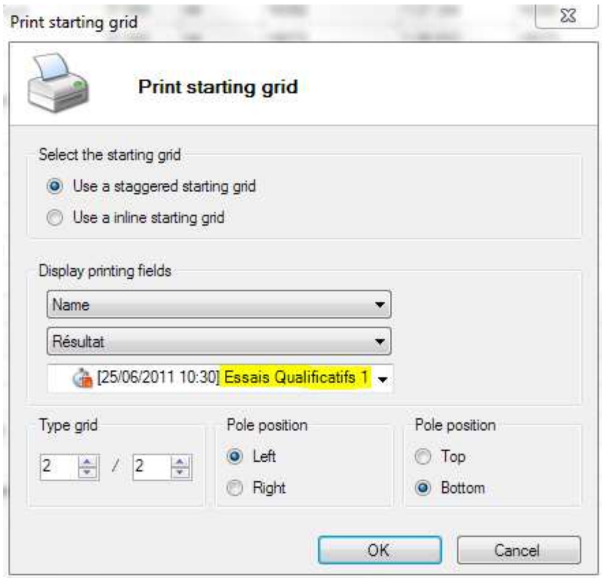
Sharing the "Config" folder on the network allows you to share all templates also

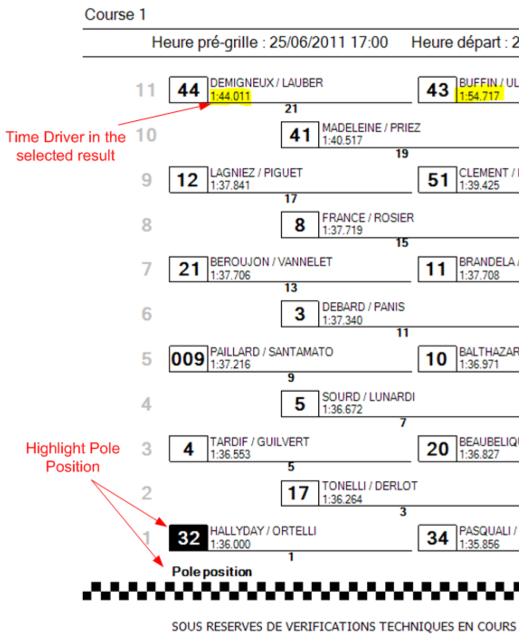


Print the classification: During an endurance race, you can make timeslot rankings

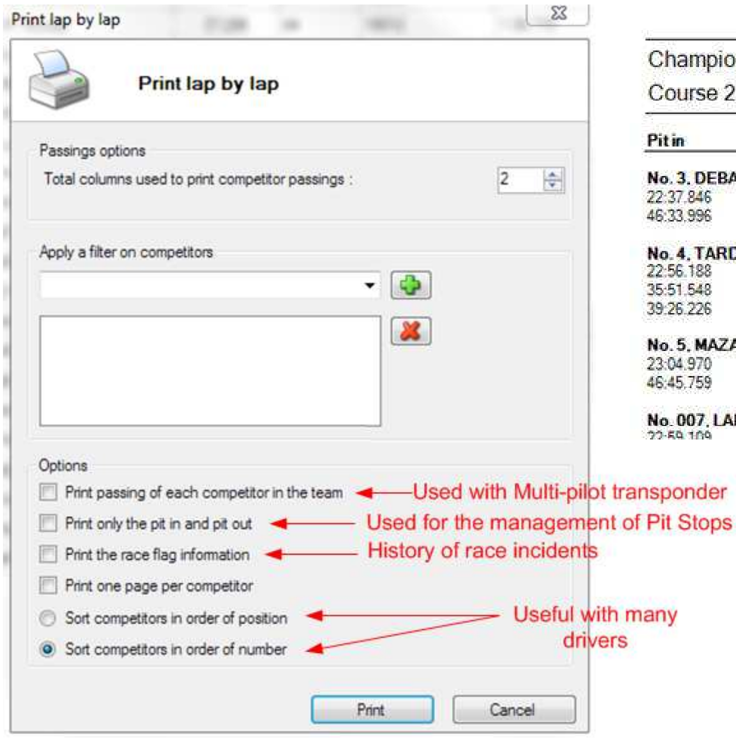


Starting Grid





Print Lap by Lap:



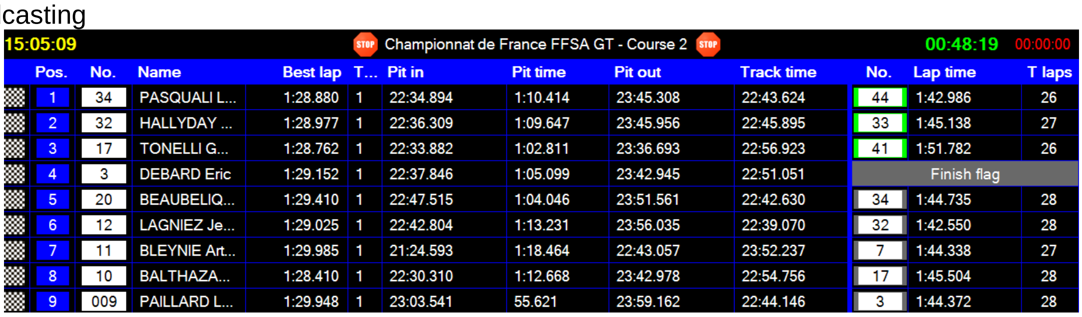


22 - 25 avril 2011

Championnat de France FFSA GT
Course 2

Pit in	Pit out	Pit time	Track time	T laps
No. 3, DEBARD / PANIS, Pos. 4, Driving time: 45:28.897				
22:37.846	23:42.945	1:05.099	22:37.846	15
46:33.996			22:51.051	28
No. 4, TARDIF / GUILVERT, Pos. 17, Driving time: 37:04.551				
22:56.188	24:02.139	1:05.951	22:56.188	15
35:51.548	37:07.272	1:15.724	11:49.409	21
39:26.226			2:18.954	22
No. 5, MAZARS / SOURD, Pos. 10, Driving time: 45:42.992				
23:04.970	24:07.737	1:02.767	23:04.970	15
46:45.759			22:38.022	28
No. 007, LAMIC / GABILLON, Pos. 11, Driving time: 46:00.267				

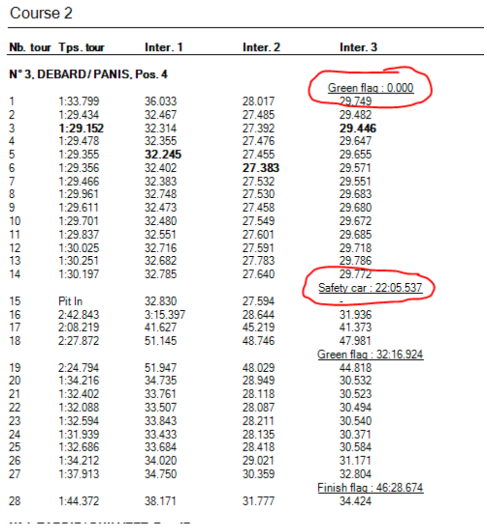
TV Broadcasting



15:05:09 Championnat de France FFSA GT - Course 2 00:48:19 00:00:00

Pos.	No.	Name	Best lap	T...	Pit in	Pit time	Pit out	Track time	No.	Lap time	T laps
1	34	PASQUALI L...	1:28.880	1	22:34.894	1:10.414	23:45.308	22:43.624	44	1:42.986	26
2	32	HALLYDAY ...	1:28.977	1	22:36.309	1:09.647	23:45.956	22:45.895	33	1:45.138	27
3	17	TONELLI G...	1:28.762	1	22:33.882	1:02.811	23:36.693	22:56.923	41	1:51.782	26
4	3	DEBARD Eric	1:29.152	1	22:37.846	1:05.099	23:42.945	22:51.051	Finish flag		
5	20	BEAUBELIQ...	1:29.410	1	22:47.515	1:04.046	23:51.561	22:42.630	34	1:44.735	28
6	12	LAGNIEZ Je...	1:29.025	1	22:42.804	1:13.231	23:56.035	22:39.070	32	1:42.550	28
7	11	BLEYNIE Art...	1:29.985	1	21:24.593	1:18.464	22:43.057	23:52.237	7	1:44.338	27
8	10	BALTHAZA...	1:28.410	1	22:30.310	1:12.668	23:42.978	22:54.756	17	1:45.504	28
9	009	PAILLARD L...	1:29.948	1	23:03.541	55.621	23:59.162	22:44.146	3	1:44.372	28

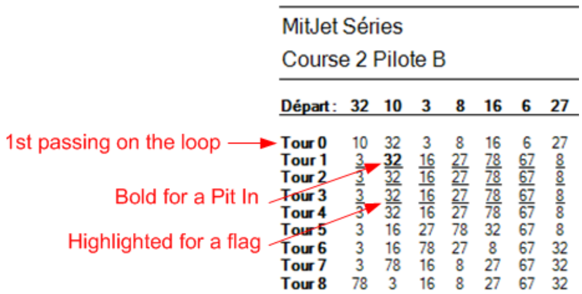
Example of Race incidents:



Course 2

Nb. tour	Tps. tour	Inter. 1	Inter. 2	Inter. 3
N° 3, DEBARD / PANIS, Pos. 4				
				Green flag : 0.000
1	1:33.799	36.033	28.017	29.749
2	1:29.434	32.467	27.485	29.482
3	**1:29.152**	32.314	27.392	**29.446**
4	1:29.478	32.355	27.476	29.647
5	1:29.355	**32.245**	27.455	29.655
6	1:29.356	32.402	**27.383**	29.571
7	1:29.466	32.383	27.532	29.551
8	1:29.961	32.748	27.530	29.683
9	1:29.611	32.473	27.458	29.680
10	1:29.701	32.480	27.549	29.672
11	1:29.837	32.551	27.601	29.685
12	1:30.025	32.716	27.591	29.718
13	1:30.251	32.682	27.783	29.786
14	1:30.197	32.785	27.640	29.772
				Safety car : 22:05.537
15	Pit In	32.830	27.594	-
16	2:42.843	3:15.397	28.644	31.936
17	2:08.219	41.627	45.219	41.373
18	2:27.872	51.145	48.746	47.981
				Green flag : 32:16.924
19	2:24.794	51.947	48.029	44.818
20	1:34.216	34.735	28.949	30.532
21	1:32.402	33.761	28.118	30.523
22	1:32.088	33.507	28.087	30.494
23	1:32.594	33.843	28.211	30.540
24	1:31.939	33.433	28.135	30.371
25	1:32.686	33.684	28.418	30.584
26	1:34.212	34.020	29.021	31.171
27	1:37.913	34.750	30.359	32.804
				Finish flag : 46:28.674
28	1:44.372	38.171	31.777	34.424

Print lap Chart:



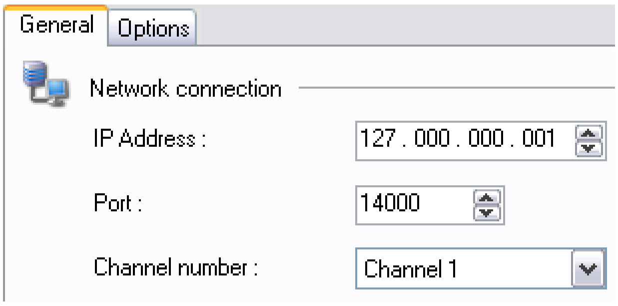
MitJet Séries

Course 2 Pilote B

Départ :	**32**	**10**	**3**	**8**	**16**	**6**	**27**
Tour 0	10	32	3	8	16	6	27
Tour 1	3	**32**	16	27	78	67	8
Tour 2	3	32	16	27	78	67	8
Tour 3	3	32	16	27	78	67	8
Tour 4	3	32	16	27	78	67	8
Tour 5	3	16	27	78	32	67	8
Tour 6	3	16	78	27	8	67	32
Tour 7	3	78	16	8	27	67	32
Tour 8	78	3	16	8	27	67	32

12. Remote Display

Start Remote display on the concerned laptop.
You can even run remote display on the same computer if a second display is connected for example. In this case, use the loopback Network address 127.0.0.1

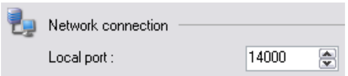


The Channel correspond to your setting in Elite v3. Different display settings can be set on each channel.

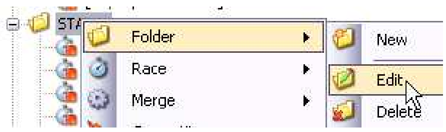


You may select the information to be broadcasted on each channel and display only information required on each remote screen.

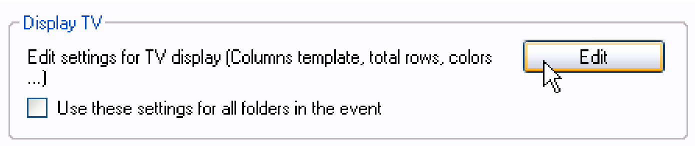
Default Port number is Port 14000. You'll have to change those settings if other network software are using the same one.

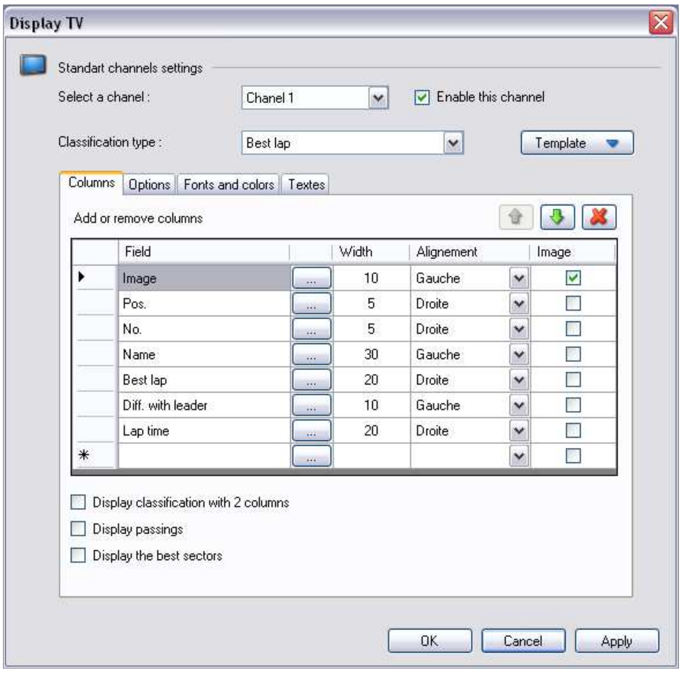


The TV Settings are available for each Race folder

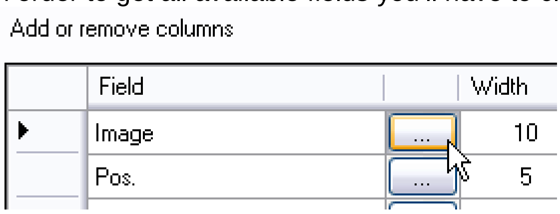


or double clic on the folder and go into **Option**



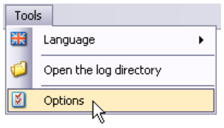


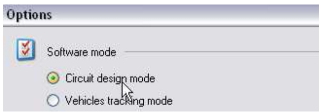
You may change all fields. In order to get all available fields you'll have to click on each columns setting



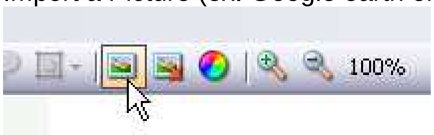
need a special add-on on the Main "master" hardlock dongle)

In order to design your track, ensure that you are in Design mode.



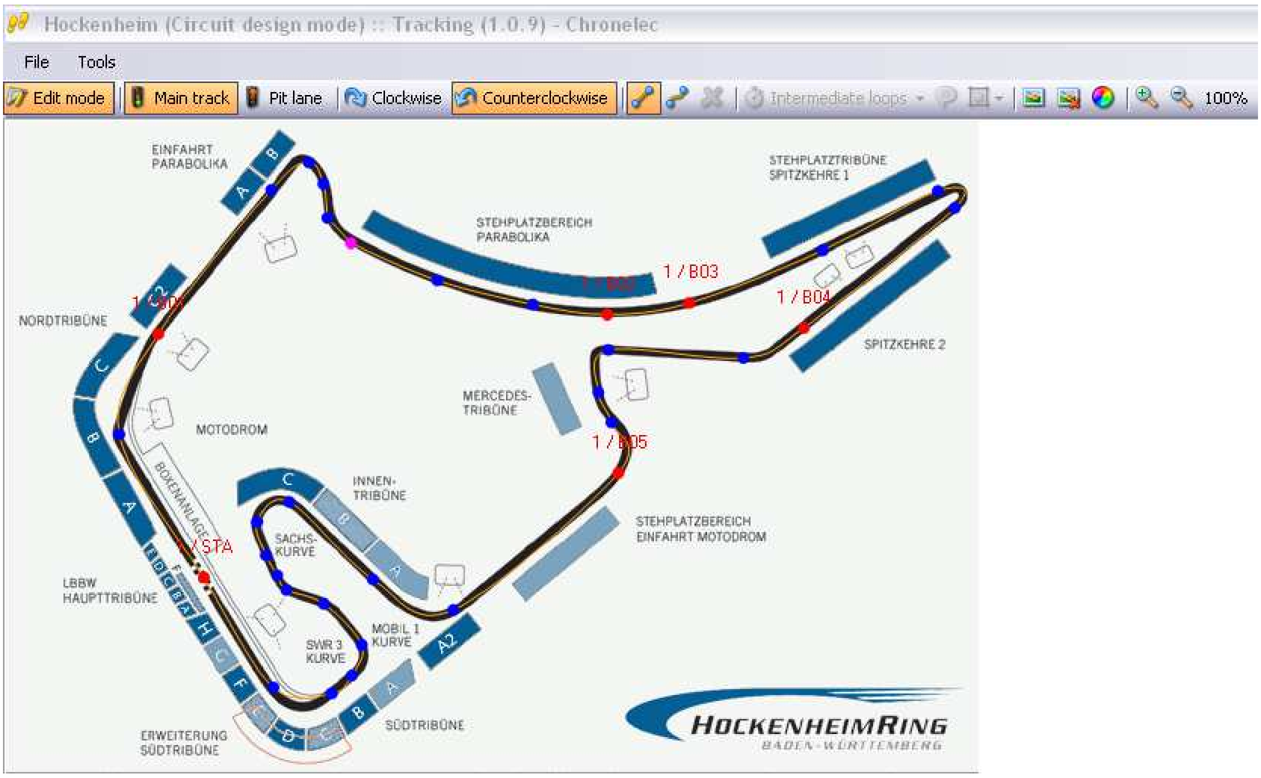


Import a Picture (ex. Google earth or Google images)



Select 

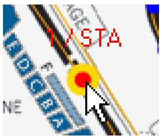
in order to start trace  with straight line or curves.

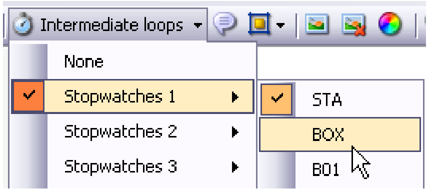


Same procedure for the Pit lane

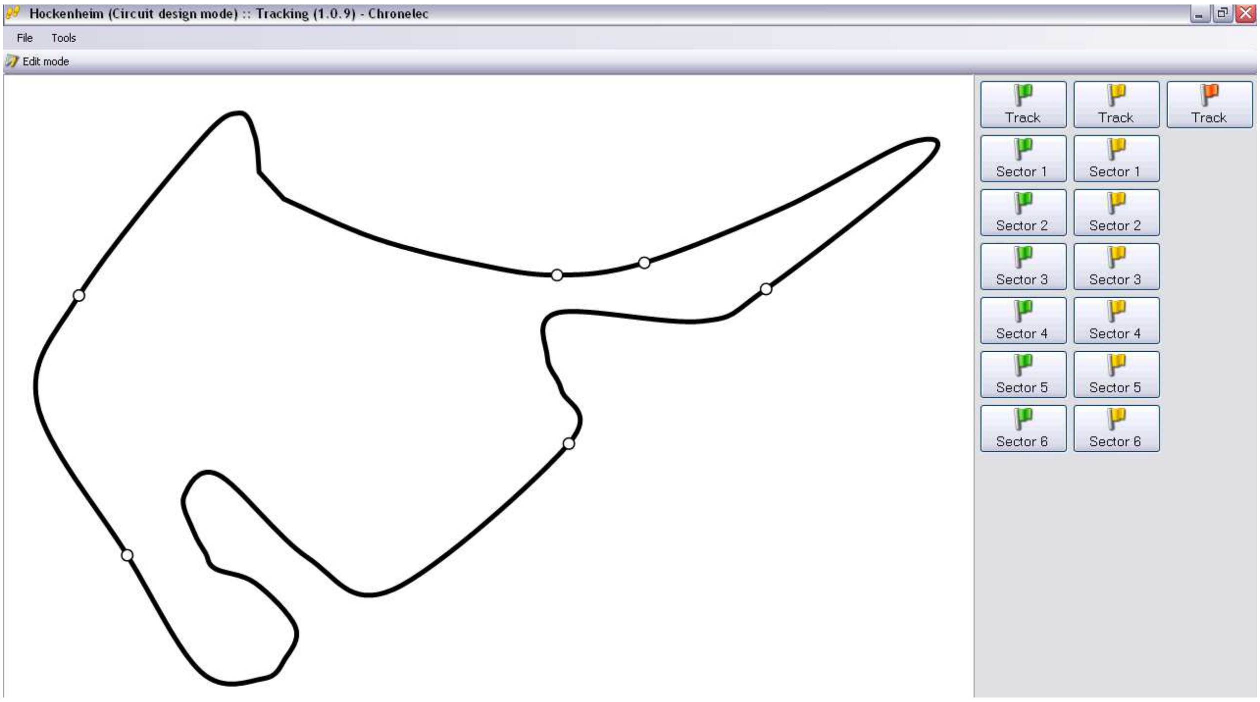


Select the track way (clockwise or counterclockwise)
Then select each loop point even for Pit in, Pit out, Start/Finish line and Splits





Don't forget to save your racetrack and note the log directories for Elite software.
You may start the vehicle tracking mode for the race direction for example.
They may follow all cars on track and even set a Yellow flag on a sector, full yello or Red flag is necessary)
This information will appear directly in the timing screen and all remote displays.



Settings are available in the same window as the Display Settings

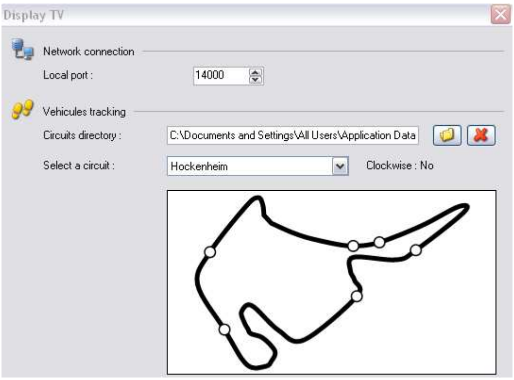
You have to select the right directory were the designed tracks have been saved.

Tracking as standalone software

Tracking with Remote Display

Activate the tracking in the display settings and select



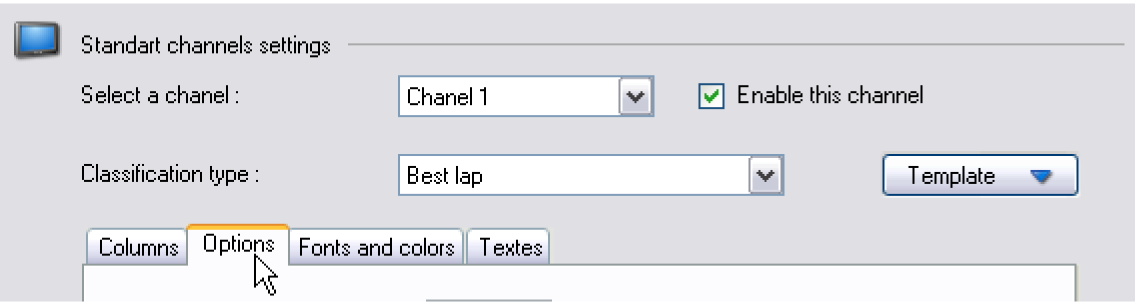


In the display settings (Folder settings / Options)

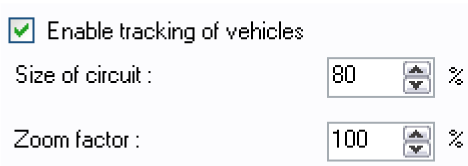
Enable the display TV output.



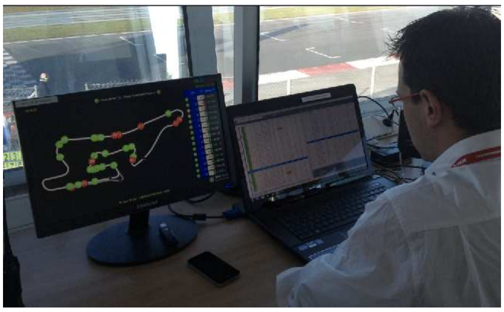
In options you may activate the tracking on the remote display (note that all settings may be different for each chanel)



Finally enable the tracking, set size and zoom factor



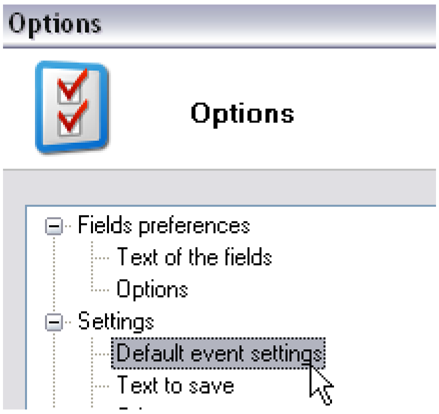


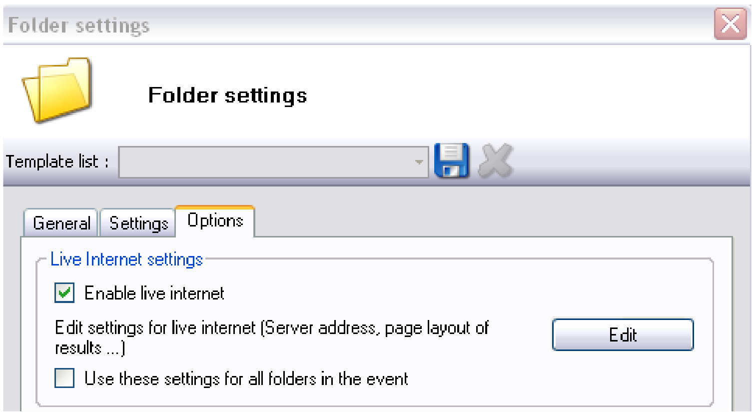


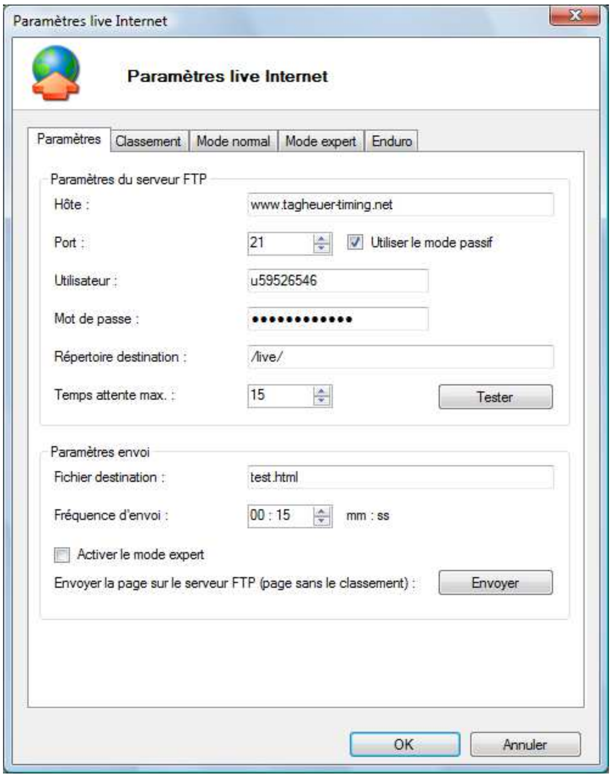
14. Live Timing

The live Internet can send the race in timing on the Internet.
The software uses a FTP connection to send the file. You must have an FTP server visible on the Internet to see the result.
You can customize the file of live Internet using the expert mode.

You will find all settings in Options / Default event settings or set all parameters for each race folder:







Complete all requested fields:

Host: url of your ftp server (in our example: www.tagheuer-timing.net)

Port: port listening of your server (default setting is usually 21)

Passive mode: « Yes » The passive mode is recommended when the client is located behind a firewall or a Network address translator (NAT). In this mode, all TCP sessions a created directly from the client.

User: user name or account name

Password : user or account password

Remote folder: Remote folder is the basic root folder on the hosting server where you Publish your site's files. Usually called public_html. After connecting to server, you may not see this folder so you must expand the directories.

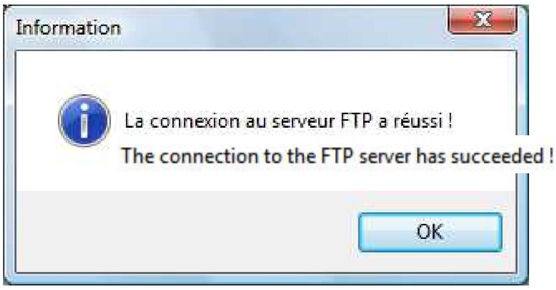
Timeout: The TCP port usually used for FTP connection is port 21. Most often the reason for FTP time out is that your firewall or Internet service provider blocks this port or because your FTP client is NOT set to use Passive mode. First of all you should make sure that you use Passive mode with your FTP client. Then, if the problem persists, you should run a check of the connection between your computer and the port 21. If there is a problem with the connectivity you should try disabling your local firewall, or, if this does not help, you should contact your Internet Service Provider.

Remote file: html page name (where the live timing is generated)
(in our example : test.html)

Upload frequency: updated information in second

With 

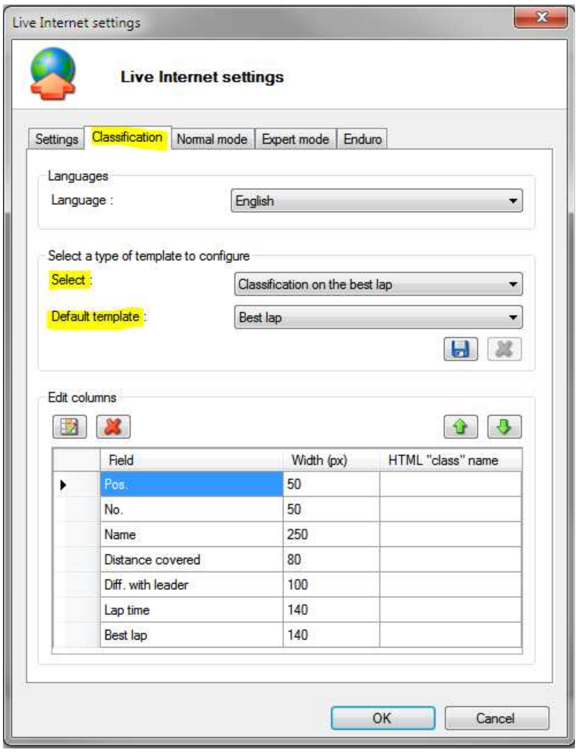
you can test the connection to your server.



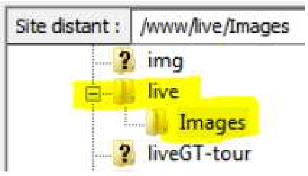
In the toolbar on the bottom you can check if the information is being sent.

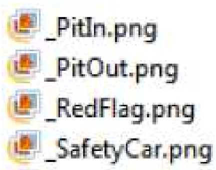


The live timing window can be modified, you may add or remove columns depending on the race you are timing.

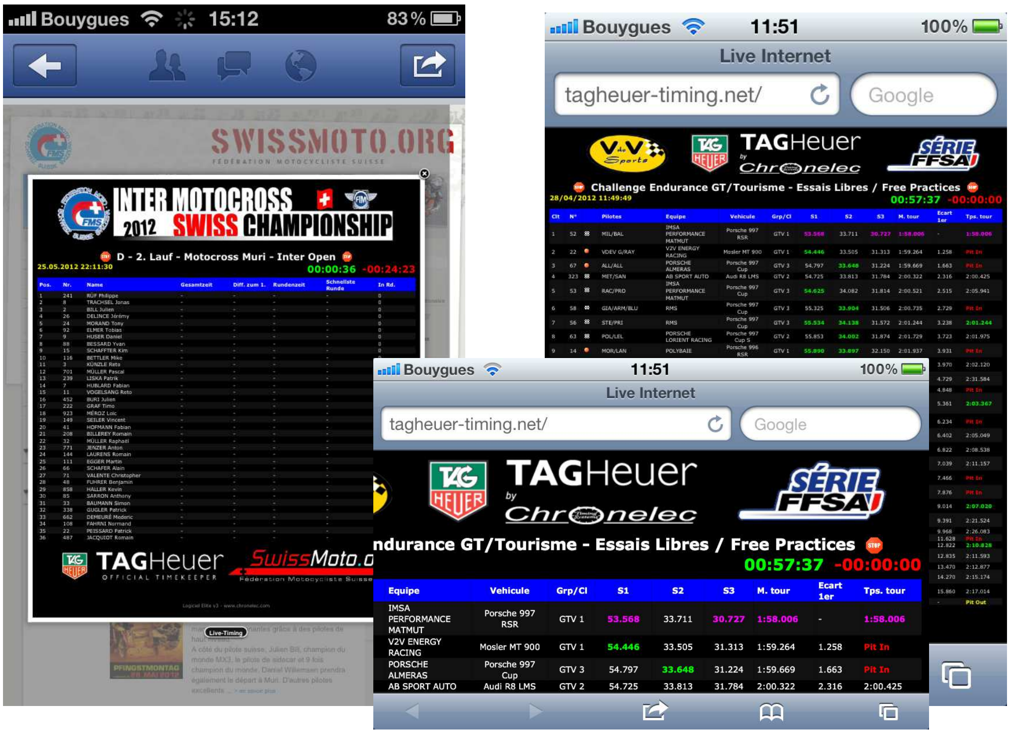


If you want show the Flags and images, you'll need to create an "image" folder on your ftp. You can find those images in the root folder of "remote display". Upload a copy of this folder.





The live Timing can even be displayed on smartphones with an Internet Navigator:



Until Elite v3 version 3.1.29 you are able to display pictures in normal mode on your pages and enhance those pictures on mouse over.



Those picture should be in the “image” folder on your ftp.

Example: You want to display the picture of GT Car Nr. 32

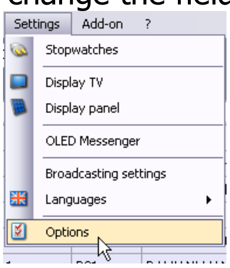
Upload your picture (im .png format) on your ftp (drop it inside the “image” folder). Ensure that the name is not used by another picture or category.

In our example, the picture name will be GT32.png 

Then set in a available custom field of the competitor the picture name (without file extension). Here custom3.

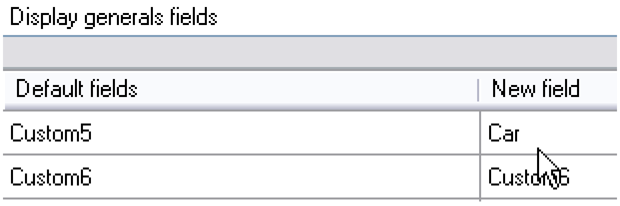


In order to change the field name (see Settings / Options / Text of the fields)



and then edit : 

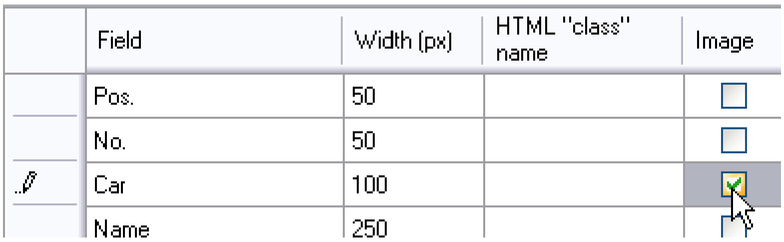
Editable Custom fields are located in the **general fields'** information:



Finally, in the classification, add the new field you created (Add/Remove columns)



Check the Image field in order to activate image (if you don't do it, only image name will be displayed)



After each modification:

Don't forget to save your template

14.1.1. Expert mode:

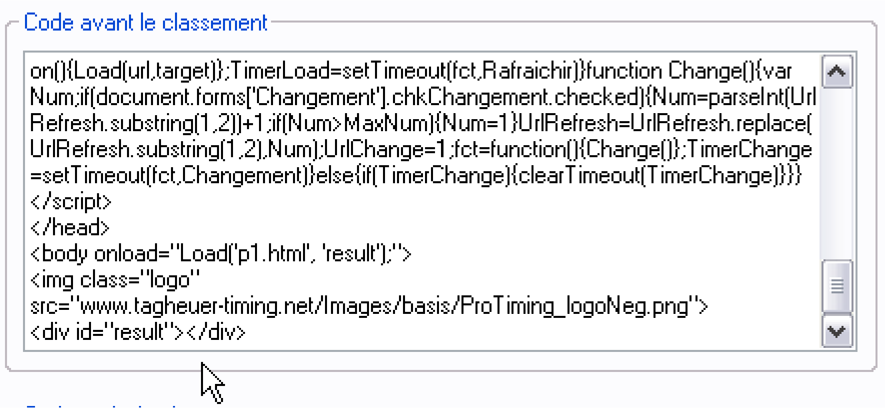
Firstly, you have to enable this mode.



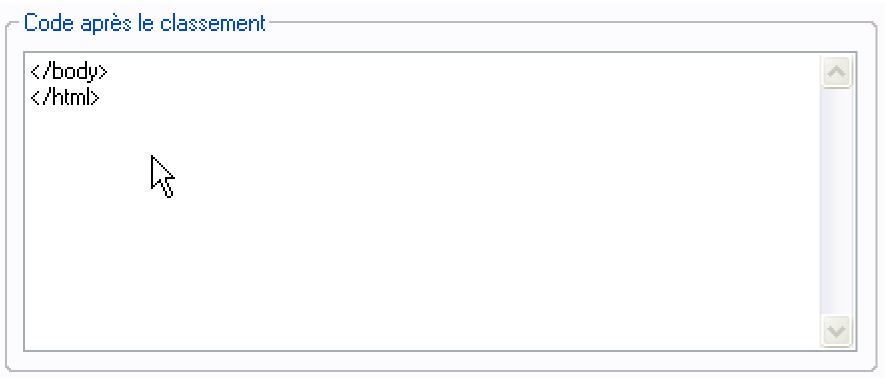
After first upload in normal mode, open your browser (right click « show source code ») or open the html file with notepad.

```
<!DOCTYPE html PUBLIC "-//W3C//Dtd html 4.01 Transitional//EN"
"http://www.w3c.org/tr/1999/REC-html401-19991224/loose.dtd">
<html>
<head><title>TAG Heuer Professional Timing</title>
<meta http-equiv=Content-Type content="text/html; charset=utf-8">
<style type="text/css">
<!--
body {font-family: Verdana, Arial, Helvetica, sans-serif; font-size: 62.5%; text-align: center; margin: 1em;
background-color: #FFFFFF;}
#menu a{margin: 0 10px; font-size: 1.4em; color: #0000FF;}
h1 {font-size: 1.6em; text-align: left; font-weight: bold; color: #000000; margin: 1em 0 1em 0;}
img {border:0;}
table {background-color: #BBBBBB;}
td {vertical-align: middle;}
.logo {float: right;}
.HeaderRow {font-weight: bold; background-color: #0046D5; color: #FFFFFF;}
.OddRow {background-color: #FFFFFF;}
.EvenRow {background-color: #DDDDDD;}
.BestOverall {color: #800080; font-weight: bold;}
.Best {color: #008000; font-weight: bold;}
-->
</style>
<script type="text/javascript">
var TimerLoad,TimerChange;var MaxNum,Rafraichir,Changement;var
UrlRefresh,UrlChange;Rafraichir=5000;Changement=15000;MaxNum=1;function Load(url,target){var xhr;var
fct;if(UrlChange){url=UrlRefresh}else{UrlRefresh=url}UrlChange=0;if(TimerLoad){clearTimeout(TimerLoad)}try{xhr=new
ActiveXObject('Msxml2.XMLHTTP')}catch(e){try{xhr=new ActiveXObject('Microsoft.XMLHTTP')}catch(e2){try{xhr=new
XMLHttpRequest()}catch(e3){xhr=false}}}xhr.onreadystatechange=function(){if(xhr.readyState==4&&xhr.status==200)docume
nt.getElementById(target).innerHTML=xhr.responseText};xhr.open('GET',url+'?r='+Math.random(),true);xhr.send(null);fct
=function(){Load(url,target)};TimerLoad=setTimeout(fct,Rafraichir)}function Change(){var
Num;if(document.forms['Changement'].chkChangement.checked){Num=parseInt(UrlRefresh.substring(1,2))+1;if(Num>MaxNum){N
um=1}UrlRefresh=UrlRefresh.replace(UrlRefresh.substring(1,2),Num);UrlChange=1;fct=function(){Change()};TimerChange=se
tTimeout(fct,Changement)}else{if(TimerChange){clearTimeout(TimerChange)}}}
</script>
</head>
<body onload="Load('p1.html', 'result');">
<img class="logo" src="www.tagheuer-timing.net/Images/basis/ProTiming_logoNeg.png">
<div id="result"></div>
<p><a href="http://www.chronelec.com" target="_blank" style="text-decoration: none; color: #999999;"><br><br>Logiciel
Elite v2 - www.chronelec.com</a></p>
</body>
</html>
```

Copy the marked text and paste it in « **code before classification** »

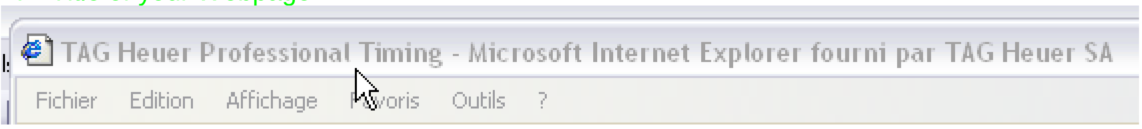


</body> and </html> tag should be paste in « code after classification »



Now you maye edit and create your own page.

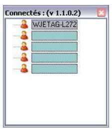
```
<head><title>TAG Heuer Professional Timing</title>
<!—Title of your Webpage  -->
```




```
<meta http-equiv=Content-Type content="text/html; charset=utf-8">
<style type="text/css">
<!--
body {font-family: Verdana, Arial, Helvetica, sans-serif; font-size: 62.5%; text-align: center;
margin: 1em; background-color: #FFFFFF;}
<!—color of the best time, here in bold text  -->
#menu a{margin: 0 10px; font-size: 1.4em; color: #0000FF;}
h1 {font-size: 1.6em; text-align: left; font-weight: bold; color: #000000; margin: 1em 0
1em 0;}
img {border:0;}
table {background-color: #BBBBBB;}
td {vertical-align: middle;}
.logo {float: right;}
<!-- -->
.HeaderRow {font-weight: bold; background-color: #0046D5; color: #FFFFFF;}
<!-- -->
.OddRow {background-color: #FFFFFF;}
<!-- -->
.EvenRow {background-color: #DDDDDD;}
<!-- -->
.BestOverall {color: #800080; font-weight: bold;}
<!-- -->
.Best {color: #008000; font-weight: bold;}
<!-- -->
```

7.3 Netmessage

This software is a network messenger. Language is automatically set as your Computer OS.
Should run on each computer on the same LAN.
Computer ID will appear automatically in the main Window

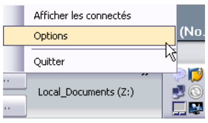


Double click on the Computer of your choice open the chat window.



Note that an option « SEND TV » is available. This feature sends your texte message on all remote display connected on your network.

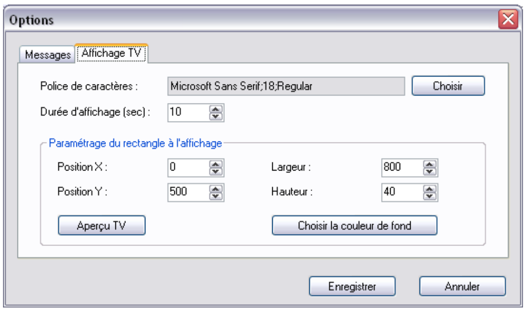
Some standard and redundant message can be saved inside the **message.txt** file.
This file should be saved on the root file were Netmessage is fired up.
In order to get the setting window: right click on the Netmessage icon in the taskbar



and select « Options »



Message settings for TV can be edited (font color, background, size etc..)



15. TAG Heuer by LYNX Photo-Finish Camera

This feature able you to get TAG Heuer by Lynx Photo-Finish Camera pictures directly into Elite V3. Both devices should run on the Network and should be synchronised.

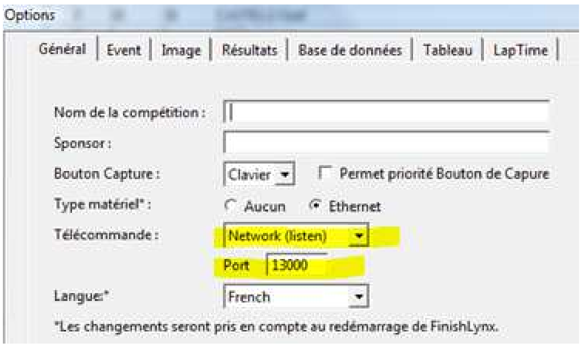


ChronelecLapTime.lss

Install the special script on the Lynx Root file (eg. C:/Lynx….),
this script is available on: www.tagheuer-timing.net/script/THbL_EliteV3.zip

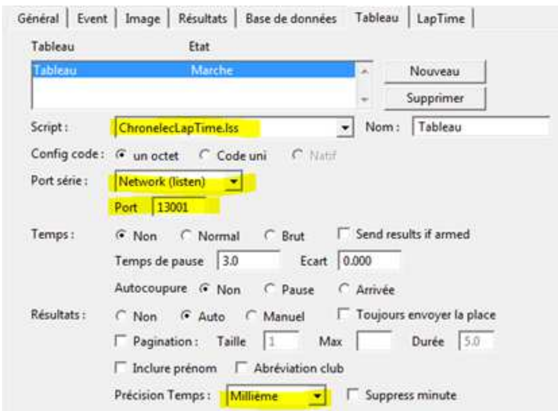
15.1.1. TAG Heuer by Lynx settings

Activate the dedicated module in "Image/Options/General"
Set Remote control on "Network listening" on port 13000



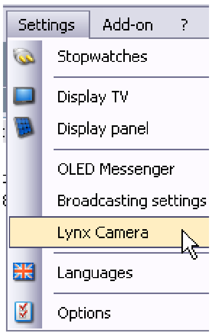
Then activate the Scoreboard module in the same window.

- Select the script you saved inside the Lynx install file.
- Set the serial port on Network listening on Port 13001
- Precision on a thousandths of a second.



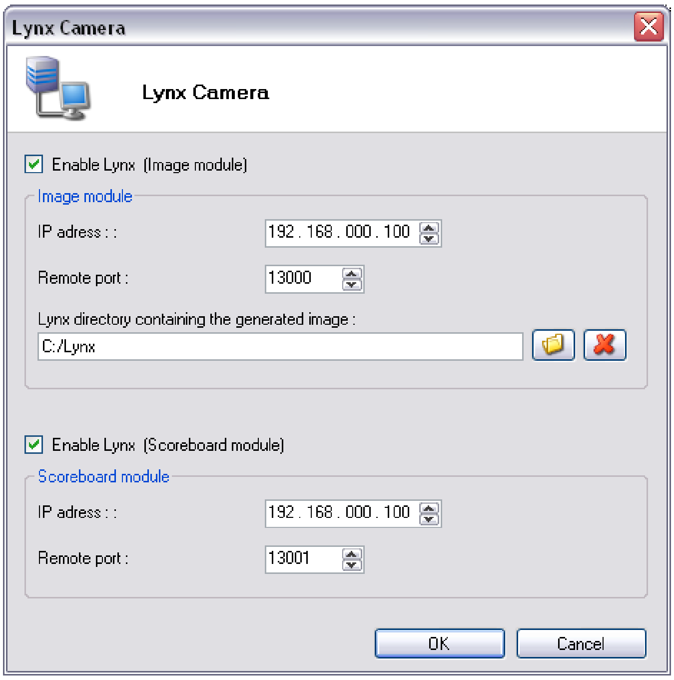
The Image module allows you to get the pictures into Elite
The Scoreboard module helps you to get all frames identified manually by the Camera operator

15.1.2. Elite V3 settings for TAG Heuer by Lynx camera



All camera settings are available in the Main settings.

- Select “Lynx Camera” and enable both options



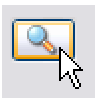
-

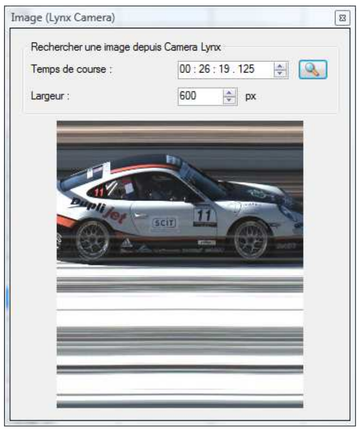
The Lynx directory should be the same as the Computer were the camera is connected and running on the same network. Please refer to chapter 2.1.1 in order to share directories.

At any moment you may request the picture directly from the timing window.



Enter the race time and click on « search ».



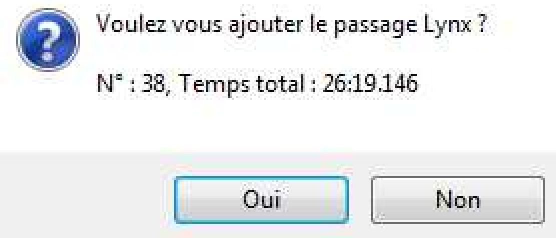


This window will automatically appear if you plugged a photocell on the decoder and set a Transponder/Photocell signal delta time (in milliseconds)

Settings / Options / Timing



If the Camera operator identifies a passing on the Lynx Software manually a pop up will ask you to add a Lynx dataframe in Elite V3

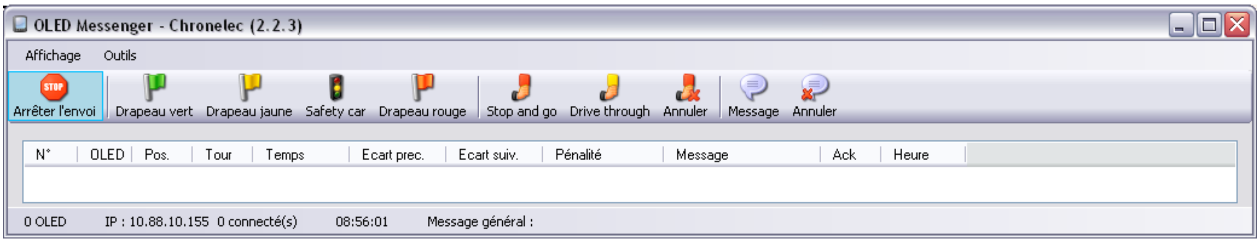


IMPORTANT NOTE :
The script sends the complete ranking at every export.
Only Elite V3 detects if a passing is missing or not.
If you leave Elite V3 where 5 competitors have been identified, Elite V3 will propose you to save those 5 competitors again on next Lynx export.

16. OLED Messenger

(note that the language will set automatically on the same language as your computer OS)
For Hardware (Onboard display) instruction please refer to it's user manual

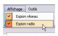
16.1. OLED Messenger.exe settings



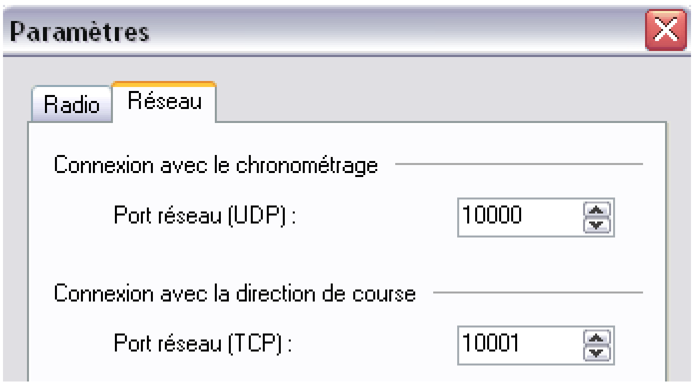
Select the COM port of the transmitter (tool)



A radio and network Spy is available (there you can check what's happening on the network and what the transmitter sends/receives)



Network settings are available in order to connect to Elite Software and even OLED Messenger (Remote).exe installed in the race direction. All port should correspond to each software in order to interact.



Oled messenger software can send a global message to all “connected” Oled Messengers





There you can select different message to send and even change the colour.

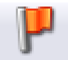
MAIN MENU:

 **STOP :** This button will stop any transmission

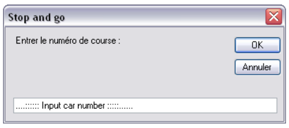
 **GREEN FLAG :** Sends a general Green Flag to all competitors. Note that even Tracking, Oled remote and Elite may send the general green flag

 **YELLOW FLAG :** Sends a general Yellow Flag to all competitors. Note that even Tracking, Oled remote and Elite may send the general yellow flag

 **SAFETY CAR :** Sends a general « SC » information. Note that even Tracking, Oled remote and Elite may send the general SC information.

 **RED FLAG :** Sends a general Red Flag to all competitors. Note that even Tracking, Oled remote and Elite may send the general Red flag.

 **STOP and GO :** Sends the Stop and Go order to one Oled. Set the competitor number and click OK



 **DRIVE THROUGH :** Sends the drive through order to one Oled. Select the competitor number and click OK

 **CANCEL :** Cancel last information sent. Select the competitor number of which the message should be deleted.

 **SEND MESSAGE :** Sends a personnal message on the bottom of one Oled Messenger. Select competitor number and click OK.

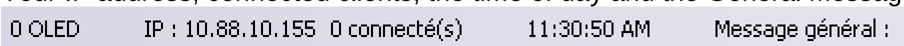
 **CANCEL MESSAGE :** Cancel last message sent. Select the competitor number of which the message should be deleted.

In the main window you’ll get all information regarding the connected Oled Messenger.

- Nr. : Competitor number
- OLED: Oled Messenger serial number

- Pos.: Competitors position
- Lap: Number of laps
- Lap Time: Last Lap time
- Gap: Difference
- Penality:
- Message: Message sent
- ACK: Acknowledge
- Time:

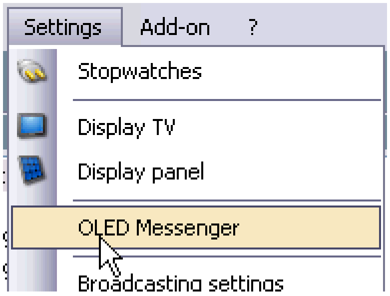
On the bottom you'll find how many Oled Messenger are detected.
Your IP address, connected clients, the time of day and the General Message displayed.



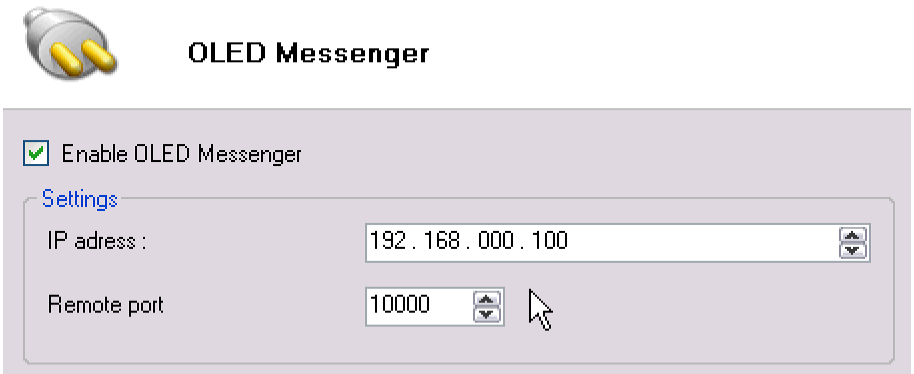
In the main Window you'll see all connected Oled Messenger and miscellaneous information as:

- Vehicle number
- Oled Serial number
- Position
- Laps
- Gap (previous car or between it's best lap in Qualifying)
- Penalties (if applied)
- Message (last message sent)
- Acknowledge signal (reception confirmation of all broadcasted messages/information)
- Time of last information received

16.2. Elite.exe settings



Enable the OLED Transmission on Elite and set the IP address of the computer were the Oled Messenger software is running. Remote port should be the same on OLED Messenger.exe



Note that all computer should be on same network and gateway.
If you are using the same computer (Elite V3 and Oled Messenger running on same computer) you should use the loopback address 127.0.0.1

17. Decoder Setting

17.1. Software "Decoder Setting"

This application allows you to set different parameters of the new decoder Elite "TAG Heuer by Chronelec".
It allows you also to test communication (Ethernet, RS232),

"New feature"
It replaces the previous software "Test Decoder" provided by Chronelec.

IMPORTANT
Only with new generation of Decoder you can change the setting with the software.
For Decoder Elite since serial number 968
For Decoder Protime since serial number 2072
For Decoder Distant since serial number 3049

17.2. Elite Decoder

The Decoder is a highly precise timing device which allows you to:
- Identify the passing of transponders and associate with a passing time
- The Elite decoder allows the management of speed and intermediate loops via RS485 or RF modem.
- The Elite decoder memorize the transponder passing information internal memory
- Sends passing information to a computer using our Elite V2 software or third party software.
- The Elite decoder is equipped with an internal battery with autonomy up to 2 hours, operational with passive loops only.
- The Elite decoder is specifically used in races that require a resolution of 1/1000th of a second.
- The decoder has an Ethernet and RS232 interface for communication with the computer.

18. “Decoder Setting” – Commands

18.1. Menu Option

On the top – left, you find a menu “Option” which allow you to

- Update the Decoder with a new Firmware
  1. You have to switch OFF the Decoder
  2. Press button ENTER and maintain it and Switch ON the Decoder
  3. Go into the Menu Option – Update, Select the file and press OK
  4. After the update, you have to switch OFF / ON the decoder

- Change the language

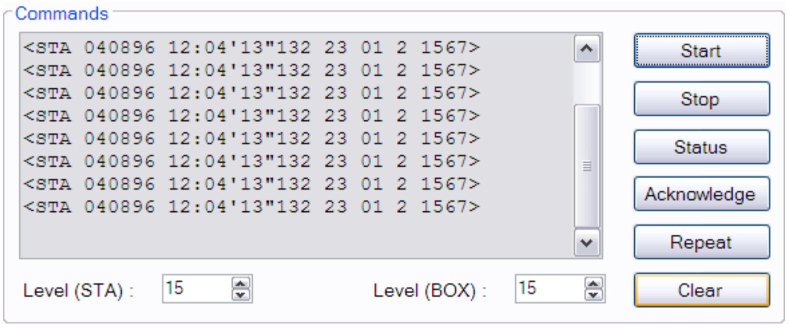
18.2. Decoder

You have the possibility to communicate with the new decoder via

- Ethernet protocol (IP Address)
- RS232 (19200 bds)
- Protocol: should be **Chronelec v3 (2009)**

For the IP address, please refer to the chapter below (chapter 3.2)

18.3. Commands



You have the possibility to visualize the frames send by the decoder

“STA” + Transponder ID = Loop STA
“BOX” + Transponder ID = Loop BOX
“STA 000255” = Input 1
“BOX 000255” = Input 2

Several commands are available

Start: Allows you to start decoder as during a race.
This start could be done also with the small button "Enter" situate to the front face of the decoder.

Stop: Allows you to stop decoder

Status: Will display the status of the decoder
The frame : [00:00'00" 43 02 25 05]

00:00'00"	Time
42	Noise on STA loop
02	Noise on BOX loop
25	Level of detection STA
15	Level of detection BOX

Acknowledge On each passing frame you have can acknowledge it manually.
Without this function, the frame will be resent automatically.

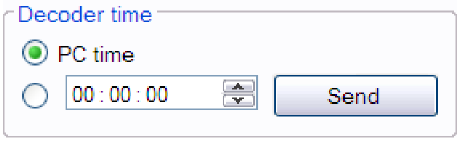
Repeat Allows you to repeat the last frame

Clear Clear the windows

You have the possibility to change the level of detection STA and BOX
To check your setting, press "Status"

Important
You have the possibility to see the setting and Status directly to the small LCD of the decoder
Please refer to the chapter 4 of this document.

18.4. Decoder Time



This setting allows you to modify the time of the decoder.
You can change manually the time by using

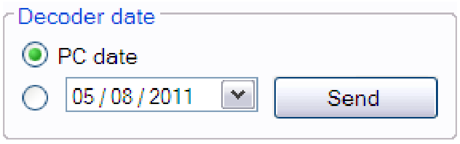
- Time of your computer
- Selected time

To see result of this setting, use the button "Status"

Important
It is necessary to Stop / Start the decoder to take the Time set into the data frame.

Note that you can also (in the Setting) get the GPS time (chapter 3.1)

18.5. Decoder Date

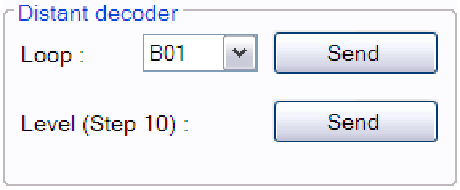


This setting allows you to modify the Date of the decoder.
You can change manually the time by using

- Date of your computer
- Selected date

Note that you can also (in the Setting) get the GPS time (chapter 3.1)

18.6. Distant decoder

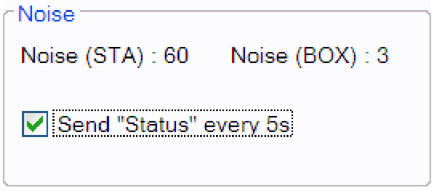


With this setting, you have the possibility to set the loop of the distant decoder.

The loop of all distant decoder could be defined with this software.

!! Coming soon!!

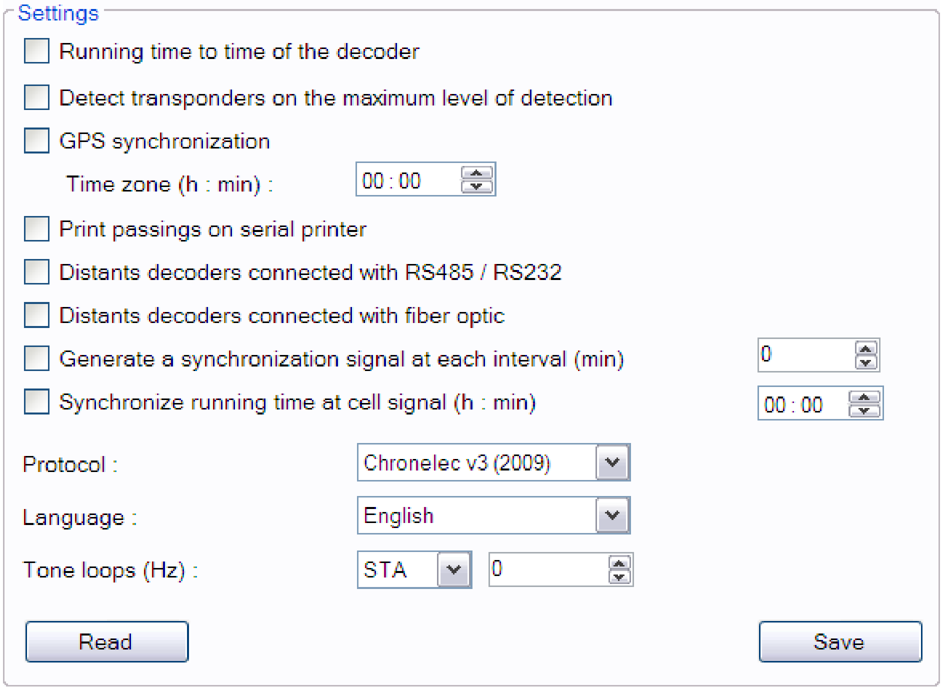
18.7. Noise level



Noise (STA) / (BOX) will show you on the value of the noise detected to each loop, without using the button "Status".
It is possible for any reason to send the "Status" automatically every 5 sec. It is very useful to check and visualize the noise level.

19. “Decoder Setting” – Settings

This menu allows you to configure all available setting.



Running Time to Time of the decoder

ON: the decoder will be sending the frame with the time of the day.
OFF: the decoder will send the frame with Start at Zero

It is important to set this correctly. If your decoder is connected to some other timing devices (Chronoprinter for example) we are recommend to running with “Time of the Day” ON.

Detect transponders on the maximum level of detection

ON: the system will search the maximum of detection from the loop. It is specially used for the race where transponders are not in a fix position (example: roller, running, where RC transponder is located to the ankle.
The system will wait that the transponder has passed completely the loop to calculate the maximum before to time the result.

OFF: on all other case, where the transponders are in a fixe position (bike, MotorSport, Karting). In this setting, you have to adjust the level of detection (see chapter 2.2)
This setting give higher precision if the level of detection is correctly set.

GPS Synchronizsation

You have the possibility to connect your decoder to a GPS antenna.
Set the Time Zone before to Save value.
You have the possibility to visualize on the Decoder, the status of the GPS (see chapter 4)

Print passing on the serial printer "New feature"

☐ Print passings on serial printer

You have the possibility to print the passing frame directly from the Decoder.
The connexion is

GND : pin 10 of the SubD-15P
Tx pin 3 of the SubD-15P
Rx pin 4 of the SubD-15P

Hence to our Multi-box decoder, you can connect directly our HL200 Serial printer directly to the Decoder

> **WARNING**
> You cannot get in same time the Printer ON and the Distant Decoder.

We recommend to change the setting of the Serial Printer HL200
SW 1 : OFF (UP) – 48 character per line

Distants decoders connected with RS485 / RS232

In standard, the communication between Elite Decoder and Distant Decoder is in RS485
Hence, you have the possibility with option to communicate in RS232

> **WARING**
> You cannot get in same time the Distant Decoder and Printer ON set

Distants decoders connected with fiber optic "New feature"

This new item is avalaible only in option (hardware option on the decoder)

Generate a synchronization signal at each interval (min)

You have the possibility to send a synchronize signal from the Decoder.
The Pin 5 and 7 of the SubD-15p are using for that.
!! Coming soon !!

Synchronize running time at cells signal

☑ Synchronize running time at cell signal (h : min) 12 : 05

It is possible to synchronize decoder with other timing device with an external Impulse (Input 2) from Sub-D15P.
You have to set the time you want to make a synchro signal, and connect a Manual Contactor on the Input 2.
Once you have saved the configuration, you have to stop the decoder.
On the next Impulse on Input 2, you will start the decoder and it will synchronize.

> **Warning:**
> **If you stop the decoder and restart it without any change of the setting, you will synchronize the Decoder.**

Language

Allow the possibility to change language (in French and English only)
Two language are available:English and French

Tone loops

Allows you change the tonality of the beep for each loop.
Use the connector Audio on the front face of the decoder

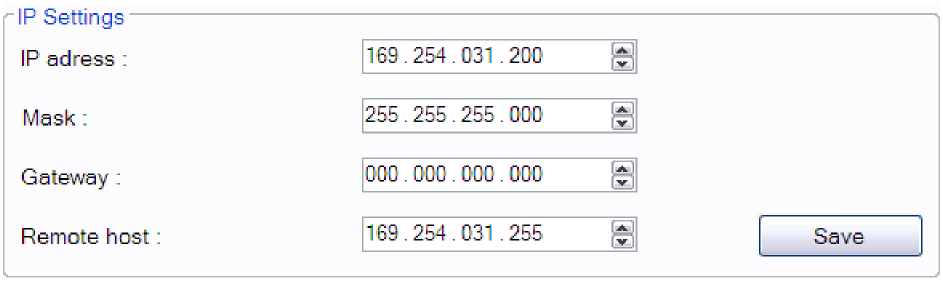
Read

It allows you to read the setting of your decoder.

Save

It allows you to save the setting from “Decoder Setting” software to the Decoder.
You have to use this, after changing setting.

19.1. IP Settings



You have the possibility to change the setting of IP Address of your decoder.
For that you have to insure that your PC has a fix IP address.

IP Address: The first 3 blocks (in my example: “169.254.031”) has to be similar between your PC and your decoder.
The last block “200” has to be different between your PC and your decoder.
Insure that no other material (Chronoprinter, Photo-finish) are connected to the LAN with the same IP addres.

Mark: Should be always “255.255.255.000”

Gateway: Allow to specify your router address
Not useful if your computer is connected to a switch with the decoder.
If not use, select:: “000.000.000.000”

Remote host: Allow to specify your router address. It is the remote IP address which receives passing’s from decoder. You can specify a unique computer or a broadcast address. If you specify a broadcast address, all computers in the same network address will receive passing’s. For example if your network is 192.168.0.0 and your subnet is 255.255.255.0, the broadcast address is 192.168.0.255

"New feature"

Thanks to the new Decoder, it is today possible to receive on the SubD-15p connector, two inputs signal from Photocells, Start Gate or other detection devices.

TAG Heuer Timing provide to simplify connection our "Multibox decoder" TCD-COM.



Font:

Input 1: Photocells
Input 2: Photocells
RS485 : communication with Distant Decoder
Black: RS485 A
Green: RS485 B
SubD-9P: Pin 1: NC
Pin 2: Tx RS232
Pin 3: NC
Pin 4: RS485 A
Pin 5: GND
Pin 6: NC
Pin 7: RS485 B
Pin 8: NC
Pin 9: NC

Back

SubD-15P
Copy of the SubD-15P of the Decoder

20. The decoder

The new decoder has not the possibility to change setting directly from the Decoder.
You have to use “Decoder Setting” software to change.

20.1. General information

20.1.1. Noise

The noise is an indication of a higher interference level received by the system.

- A loop with a noise level of **0** corresponds to perfect so the decoder will detect the transponders at the highest.
- A loop with a noise level between **0** and **35** allows the decoder to detect the transponder in normal use without problems.
- A loop with a noise level between **35** and **45**: there is a risk that the decoder will fail to detect a transponder.
- A loop with a noise level of over **45**: there is very little chance that the decoder will detect the transponder on the loop.

If the noise level is higher than **45**, it is necessary to check all the of the system cables including (loop wire, resistance of the passive loop, coaxial cable, BNC connectors…) and make sure there is no electronic equipment within 2 meters of the loop (LAN and printer cables, short-wave radio station, electricity or generator near any of the cables or timing loops., …) which may be the cause of increased noise.

Note:

A decoder, without connected loop can already show a noise level between 2 and 8 points.

The important thing is to check the detection range of the transponder directly over the loop.

20.1.2. Level of detection

You can change this parameter in the setting page of the decoder to increase the accuracy.

- **0** is the maximum sensitivity of loop / transponder detection
- **95** is the minimum sensitivity of loop / transponder detection (usually with this setting, you will no longer detect the transponder).

By default the decoder is already programmed with a level of detection of **10**.

20.2. Front panel of the Elite decoder



Jack plug: MAN

Used to connect a Manual Contactor (HL18) to give impulses manually.
Warning: this input could be not use as precise input (only for manual purpose).

Received frame <STA> with ID Nr. 255

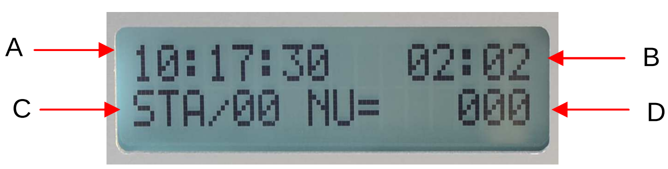
Jack plug Audio

Allows you to connect computer speakers or headset in order to listen the beeps emitted at each transponder passing.
You can set the beeps frequency in the menu “TONALITY BEEPS” (setting from “Decoder Setting”)

LED **STA** Flashes red when a passage of a transponder is identified by the “STA” loop.
Box Flashes red when a passage of a transponder is identified by the “BOX” loop”.
Tx Flashes red every 10 seconds. It is to confirm that the decoder sent the synchronization to the distant decoder (only with Elite decoder) Led Indicator “Tx” will flash red when a passage of a transponder is identified by the intermediate loops. This led indicator also allows you to visualize the number of intermediate loops connected to the decoder.

ON Indicated that your Decoder is ON (on battery or on the sector)
”New feature”

LCD Two lines display allows you to get the setting of your decoder (without “Decoder Setting” connected.
Main Menu



A: Race Time information
B: Time of the day
C: Status: Loop / Level of reception (last passing)
D: Transponder serial number (last passing)

Menu button

This button allows you to navigate into the different setting information.
It automatically comes back to the main display after couple of second.
Main menu:

Each time you press the Menu button, you change as follow

1.	Loops Noise	(value BOX / STA)
2.	Loops Level	(value BOX / STA)
3.	Detect Max	(Yes / No)
	Prot.	(protocols of the decoder)
4.	GPS Sync	(Yes / No)
	Time of Day	(Yes / No)
5.	Time Zone	(value)
	GPS Status	(Wait / OK)
6.	IP Address	(value)
7.	Subnet	(value)
8.	Gateway	(value)
9.	Remote Host	(value)
10.	Print	(Yes / No)
	Ext. Sync	(Yes / No)
11.	In Sec	(Yes / No)
	Time Sync	(value)
12.	RS Inte.	(Yes / No)
	Opto Into	(Yes / No)
13.	STA Tone	(value)
	BOX Tone	(value)
14.	MAN Tone	(value)
	Cell Tone	(value)
15.	BXX Tone	(value)
16.	ID / Version	
	Power	(ON / OFF) – if the decoder work on battery or on sector

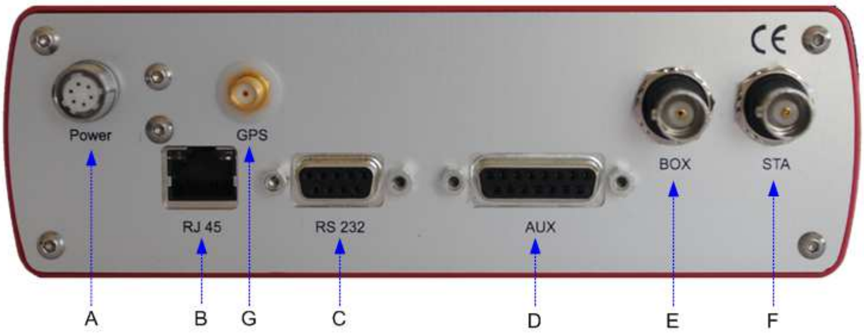
Button Enter

Allows you to Start the decoder manually

Internal Memory

--------------------------- coming soon-----------------------------

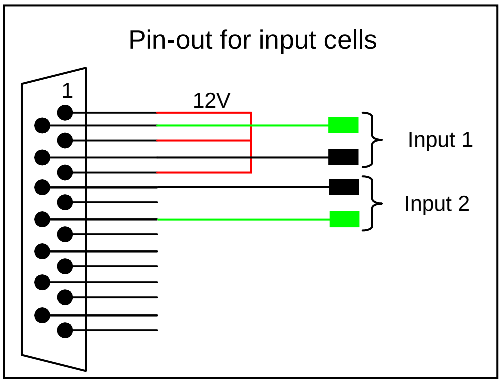
20.3. Rear panel of the Elite decoder



A : 12Vdc Power supply connection
B : RJ45 connection (192.168.0.10 default address) to computer. Cannot be used at the same time as the RS232
C : RS232 connection (19200,N,8,1) Cannot be used at the same time as the RJ45!
D : DB 15 Auxiliary connection (Pinout available upon request)
E : BOX input loop (Option : Often used for Pit In/Split timing)
F : STA input loop (often used for Start/finish line)
G : GPS connection

20.4. Pin-out DB15

1 : Input Cells 1 +
2 : Input Cells 2 +
3 : TX RS232
4 : RX RS232
5 : +12 V
6 : Resitance RS485
7 : Output 1
8 : Output 2
9 : Input Cells 1 -
10 : 0 V
11 : 0 V
12 : Input Cells 2 -
13 : +12 V
14 : RS485 A
15 : RS485 B



21. Decoder technical specification

Specification:

- GPS Synchronization
- Intermediate loops (up to 10) – option up to 32 loops
- Clock stability : Oscillator TCXO 0.5 ppm
- Power : 12 VDC via adapter
- Temperature range : -20 à 55 °C (-4 à 131 °F)
- Dimensions : 160 x 100 x 52 mm (6.3 x 3.9 x 2 in)
- Resolution : 0.001 s

Detection loop :

- Maximum width of the track (passive loop) : 25 m (82 ft)
- Maximum width of the track (active loop) : 10 m (33 ft) I throught this was 15 meters
- Maximum length of the coaxial cable (passive loop) : 100 m (330 ft)
- Maximum length of the coaxial cable (active loop) : 50 m (164 ft)

Over those distances, use Distant Decoder to insure good timing

22. Transponders

22.1. RK, LS, Elite, Elite Pro installation

- The position of the rechargeable transponder or a wire transponder is the same
- The transponder must be place in the same position in all vehicles
- The transponder must be perpendicular to the circuit, because it uses a directional transmission

To ensure the proper functioning of the transponder, no metal or carbon part should be place between the transponder and the track





Wired Transponder as LS Wire or Elite Wire should be powered on +12V continuous power

Red or brown wire: + 12V

Black or Blue wire: 0V

22.2. Passive Transponder (RCS and RC)

TAG Heuer provides two type of brackets:

The Neoprene strap and the Bike bracket





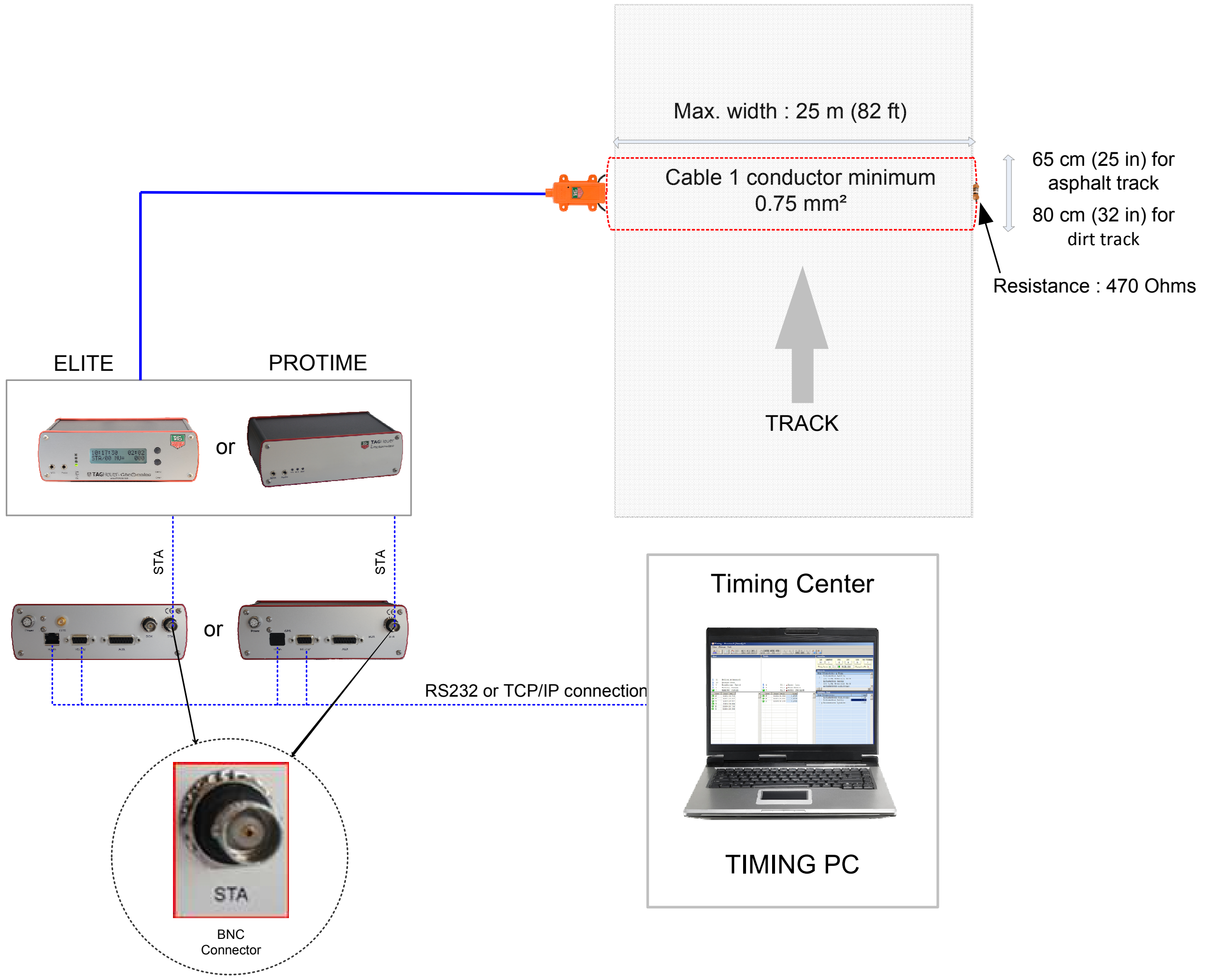
As the Active tranponder, the beam of the

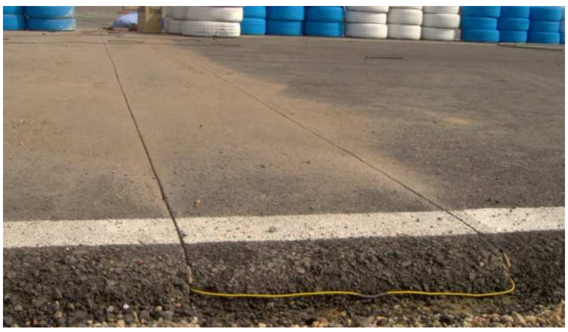




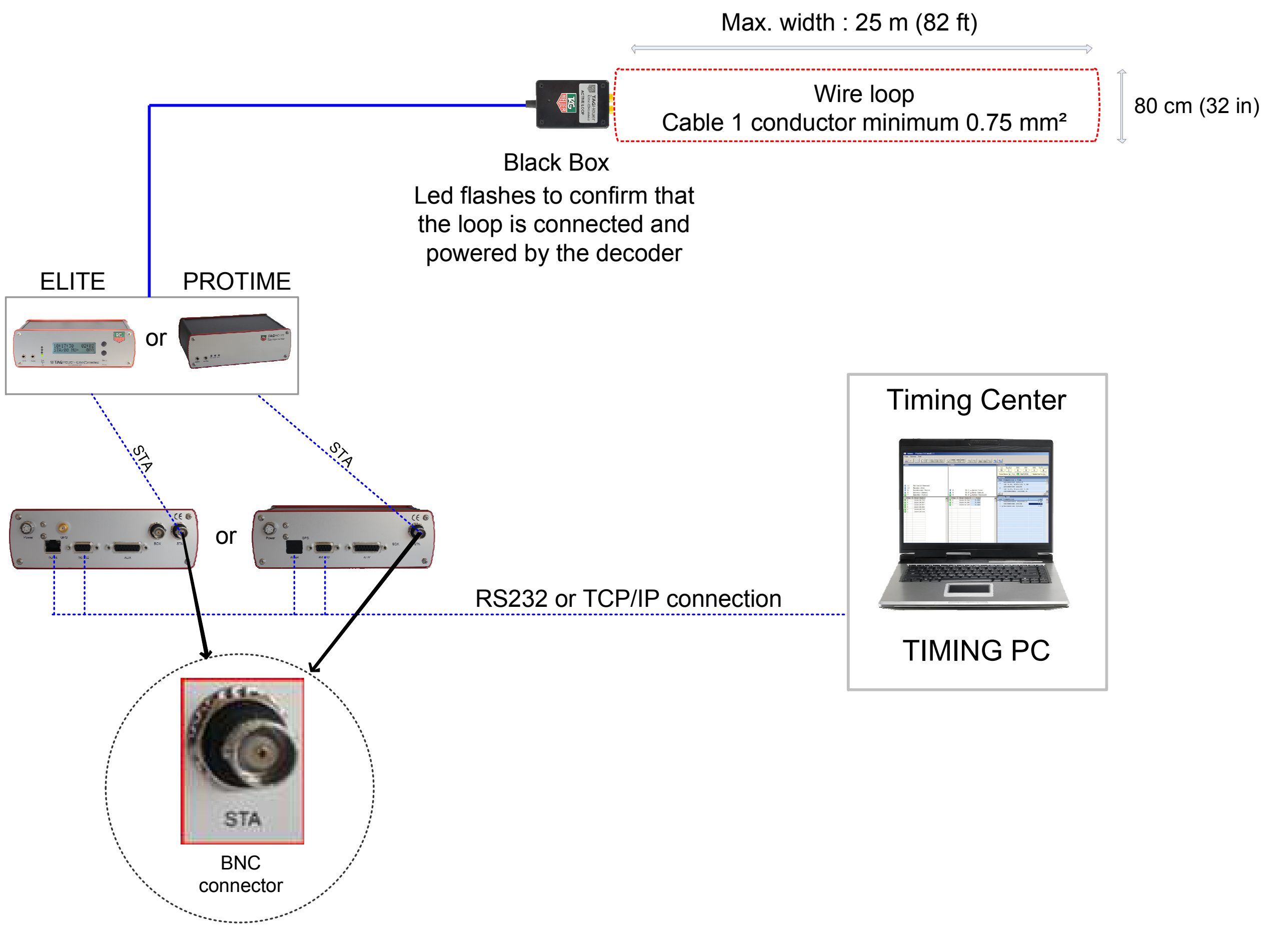
23. Loop Installation

23.1. Passive loops (LS, Elite Transponder)





23.2. Active Loops (RCS, RC, RCT and RK Transponder)



In some case, depending the speed, transponder position etc. you may set the loop width at 1 meter

Question / Answer

I can not detect the decoder.
Check the COM port or IP address of the decoder. Check the protocol selected.
If you have a red dongle, you can not detect the decoder. One possible remedy is to click on test button at the same time that the PC has the blue dongle.

What does STA and BOX mean at bottom left ?
STA means noise (disturbances) on the main loop (START) and BOX means noise on the pit lane loop.

I receive BOX passings.
You probably have an inverted loops decoder. The BOX loop is normally used for the pit lane.

***My classification is false*.**
Check the type of classification of the race. You may have selected classification on best lap, instead of being on the total laps (or vice versa).
You may have to check whether you have staggered start enabled, if your race is not a staggered race.

***All passings are orange and I have no classification*.**
The minimum lap time for passings is not respected. Edit the race settings to change the minimum time and confirm all orange passings.

***Laps of the 1st passings are not calculated*.**
Edit the race settings to consider the 1st first passing as full lap. To recalculate the classification, click on race menu and then Recalculate Classification. 

There is no display on the TV monitor.
Check the display settings for the graphics card in Windows; you must activate the option to extend the Windows desktop.
Check that you have turned the channel onto TV display settings in the software.

Distant decoders are recognized by the Elite decoder but get no passings on intermediates into Elite v3
Communication is working, check that the option « Display intermediates » is activated in the timing window
 « Display intermediates and photocells passing »

TAGHeuer
PROFESSIONAL TIMING

TAG Heuer
PROFESSIONAL TIMING
6A Louis-Joseph Chevrolet
2300 la Chaux-de-Fonds
Switzerland
Tel : 032 919 8000
Fax : 032 919 9026

E-mail: info@tagheuer-timing.com
Http: //www.tagheuer-timing.com